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THE DIAGNOSIS OF ACUTE ABDOMINAL DISEASE.

By A. E. Russell, M.D.

By acute abdominal disease is meant an acute illness of mechanical, infective or vascular origin, occurring in connection with the alimentary canal, the peritoneum, or the abdominal and pelvic viscera; associated with urgent symptoms, among which abdominal pain, vomiting, constipation and shock predominate. These symptoms, with many others, are present in a variety of conditions, and the correct diagnosis of the cause underlying them is a matter of urgent importance, inasmuch as a large majority of the cases are only amenable to prompt surgical treatment.

Fortunately the symptoms are nearly always so imperious as to command attention, and the object of this paper is to discuss the method of procedure which should be adopted, and the facts on which stress should be laid, to enable us as far as possible to arrive at a diagnosis of the cause of the acute abdominal symptoms in any case with which we may be confronted.

The Onset.

(1) *Suddenness of Onset.*—The onset of any acute abdominal disease is, from the very nature of the condition we are describing, *sudden or at least rapid.*

(2) *Abdominal Pain.*—The onset is nearly always associated with *pain*. To this rule there are few exceptions. In the course of a severe attack of enteric fever perforation may occur in an unconscious or delirious patient, who of course may make no complaint of pain. The abdomen of a delirious typhoid patient should therefore be scrutinised daily with most scrupulous care so that any abnormal physical signs shall be recognised before it be too late to interfere with any prospect of success. A similar latency of onset is observed occasionally in uræmia, in which condition suppurative peritonitis is not a very uncommon complication, and is apt to be found unexpectedly at the autopsy.

The exact locality of the pain is of importance. At the onset of many affections it is either general or is referred to the umbilical region, but later the situation of the pain as referred to the abdominal wall is a very fair indication of the position within the abdominal cavity of the seat of mischief. I would instance as examples the pain in the left upper quadrant of the abdomen in perforation of a gastric ulcer, the pain over the gall-bladder region in cholecystitis, in the loin and along the course of the ureter in renal colic, in the epigastrium in pancreatic hæmorrhage and acute pancreatitis, in the right iliac fossa in appendicitis. In perforation of a typhoid ulcer the pain is frequently experienced at a point in the abdominal wall exactly overlying the site of perforation.

(3) *The Character of the Pain.*—In perforative lesions the pain is of a very severe character, and may be agonising. In acute obstruction the pain is also extremely severe; in fact, the symptoms of acute obstruction are rather those of peritoneal shock than of obstruction. In the less urgent forms of obstruction the pain may be of a colicky, paroxysmal character, resembling that of lead colic. In peritonitis it is more persistent.

(4) *Vomiting.*—This symptom is nearly always present in any severe acute abdominal disease. In the early stages it is no doubt reflex in origin: the contents of the stomach are rejected and soon after bile-stained intestinal contents. Later still the vomitus assumes special characters.

(5) A *rigor* is not uncommon, and there is nearly always a rise of temperature at the onset of peritonitis: both are rare in obstruction.

(6) *Constipation.*—This can hardly be described as a symptom of the onset.

(7) *Pulse.*—This is nearly always increased in frequency, and is small in volume.

(8) Any *immediate exciting cause* must be enquired for, such as trauma. The strain of lifting a heavy weight or the ingestion of a large meal may precipitate, for instance, the rupture of a gastric ulcer.

(9) The *aspect of the patient*, even in the early stage, is of importance. He is usually decidedly anxious and distressed in appearance, and is commonly convinced that some serious catastrophe has occurred. In peritonitis the thighs are frequently flexed on the abdomen, so as to relax the abdominal wall.

Having elicited a full account of the mode, time, and circumstances of the onset of the illness, the previous history of the patient should be enquired into, and attention should be directed to the following points:—

(1) The presence or absence of *previous similar attacks.* Information of the greatest value is often forthcoming. Thus, the patient may have suffered from appendicitis; or a history of biliary colic and jaundice, or of long indigestion with vomiting and possibly hæmatemesis, or of renal colic with hæmaturia may be obtained; a history of hysteria or neurasthenia is of value. In this connection it must be noted that the knee-jerks should be examined, as the gastric crises of locomotor ataxy may be so severe and attended with such abdominal pain that laparotomy has been performed for the want of this precaution.

(2) The previous condition of the *bowels* should be ascertained. A history of progressively increasing constipation, coupled often with loss of weight, may indicate malignant disease, which not infrequently culminates in complete occlusion of the bowel and the symptoms of acute abdominal disease.

(3) The existence of *rupture* should be enquired for, and, in the subsequent examination, the *rings* should always be examined, especially for the presence of small femoral herniæ, which are rather apt to be overlooked.

(4) The *menstrual function* should be thought of. The importance of a full history of this function will be referred to later, when considering extra-uterine gestation.

(5) Abnormalities in the *character and flow of the urine* should be enquired for.

(6) *Enteric fever* in the past may be the cause of gall stones or cholecystitis or of peritoneal adhesions.

After eliciting information as to the mode of onset and the previous history of the patient, but bearing in mind that in many cases the condition of the patient is such as to preclude much questioning, and that information is to be derived from the friends instead, the actual examination of the patient must be undertaken.

The Facies.—During the preliminary questioning the aspect of the patient will have been carefully noted. Even in the earlier stages of an acute abdominal catastrophe an anxious expression will usually be present. In the later stages there is a progressive change terminating in that group of characteristics—the pinched face, the sunken eyes, the dried and often encrusted lips, with often a bright flush, or a livid grey tint, which is so well known under the name of facies Hippocratica. The rapid gasping respiration, with movements of the alæ nasi, will indicate the extent to which the abdominal respiratory movements are impeded.

The facial appearance in a patient suffering from acute abdominal disease is that of a person who is seriously ill. To this rule there are but few exceptions.

The Examination of the Abdomen.

Naturally we seek here for the greatest information. The examination must be systematic and thorough. It cannot be emphasised too strongly that there is no need for hurry. If the case is seen early, a quarter of an hour can make little difference—if late still less.

(1) Inspection.—The abdomen should never be palpated until a careful visual examination has been made. A good light is essential. Attention is to be directed to:—

(*a*) *Abdominal Respiratory Movements.*—With free movement there is not much likelihood of serious mischief. If the movement be impaired it is to be noted whether the impairment is general or only confined to the lower part. Impairment is often unilateral; thus, the left upper quadrant may move little or not at all in a case of perforated gastric ulcer, while

the right upper half shews quite a fair range. Similarly in cholecystitis the right upper half is affected.

(*b*) *Distension.*—To appreciate this correctly it is necessary first to have a conception of the conformation of the normal abdomen. This naturally varies within wide limits. In the thin subject the abdominal wall is slightly excavated below the ensiform cartilage. In a fat subject it is protuberant. We do not expect to see a prominent abdomen in a thin subject, unless he is the subject of ascites, or some such affection.

Distension may then be general, or it may be local. Such local distension is of the greatest importance, and may give a clue to the diagnosis. It is very commonly present, for instance, in appendicitis. In examining for its presence, the abdomen must be examined not merely from the side of the bed but the examiner must lean over the patient so that he can see it from above. The patient must, for this purpose, lie absolutely flat, with the legs straight and symmetrically placed. With such precautions, a slight fulness in the right iliac fossa in appendicitis, or in the right loin from a high appendix abscess, or a bulging in the region of the lower ribs from a subdiaphragmatic abscess, may be frequently detected.

The lower half of the abdomen is the first to show distension in pelvic disease, the upper in pancreatic, gastric, duodenal, and gall-bladder affections. The outline of a dilated stomach is frequently visible. With great abdominal distension from dilated coils of intestine, or from the presence of much fluid, or from both combined, the local signs which were probably present in earlier stages disappear, and the skin assumes a shiny, glossy appearance.

(*c*) *Peristaltic Movements.*—These are not usually seen in acute obstruction but are very common in chronic and incomplete obstruction, and the belly wall may rise and fall as the result in a most characteristic fashion, the contour of the contracting coil being clearly visible.

In subacute and chronic obstruction of the small intestine, the outline of the distended coils may be very clear, and they may form a series of parallel coils, more or less horizontal, most clearly marked in the middle region of the abdomen. They are best seen in thin patients, and are a sign of considerable hypertrophy of the muscular wall of the bowel. In acuter forms they are less obvious.

(2) PALPATION.—After thorough inspection, the abdomen should be palpated. The hand should be warm and laid flat on the abdomen. As a rule, only the slightest pressure should be used, and deep pressure, if used at all, should be reserved until after a thorough examination by the flat hand laid lightly on the abdominal wall. To dip the fingers deeply into the abdomen is not only very painful, but evokes such reflex rigidity as to interfere seriously with further examination. The normal abdomen presents to the palpating hand an elastic and yet at the same time a somewhat doughy feeling.

Bimanual palpation must also be employed—one hand being in the loin behind, the other in front. It is of particular value in renal disease.

The points to be looked for are :—

(*a*) *Tenderness.*—This may be local or general. In peritonitis pressure is very painful; little, and sometimes scarcely at all, in obstruction. In cases of intestinal colic, firm pressure may actually relieve the pain.

(*b*) *Rigidity.*—This also may be local or general. With a local lesion, such as cholecystitis, only a single segment of the rectus abdominis muscle may be rigid. Care must be taken to avoid mistaking the rounded outline of one of these contracted segments for a tumour underlying the abdominal wall.

(*c*) *The Presence of a Tumour or Inflammatory Mass.*—The whole abdomen is to be carefully explored. If any abnormal mass is detected its special features are to be noted, whether it is hard, soft, tender, or tense, so as to suggest a cyst or localised collection of fluid. Most important of all is the position of such mass. Its position may correspond with that of the gall-bladder, the appendix, or the kidney. It may rise out of the pelvis and suggest disease of ovary, fallopian tube, or uterus. The mass may be superficial, as in the case of splenic enlargement, or deep, as in renal tumours, &c. The effect of respiratory movements on the mass are to be noted.

(*d The Presence of Free Fluid.*—If present in large amount, a thrill may be obtained from side to side. If the fluid is only present in the lower half of the abdomen, a thrill is often found from iliac fossa to iliac fossa, and even over a still more localised area. When present in small quantities, its presence must be sought by other means, which we will consider under percussion.

(*e*) *Gurgling.*—A characteristic sign in an incomplete obstruction is the sizzling feeling that is communicated to the palpating hand when over the site of the narrowed portion of bowel. It is produced by the passage of gas and fluid through the narrowed portion.

(3) PERCUSSION.—Percussion yields many points of interest.

(*a*) *Tenderness.*—In peritonitis percussion causes much pain and should be practised very gently; in obstruction it causes little or none.

(*b*) *Undue Resonance and Extent of Resonance.*—A conception of the percussion note over the normal stomach and colon, and the normal range of variation over the whole abdomen, is necessary. With great distension of the intestinal coils the whole abdomen may be unduly resonant. A resonant note may be present over a renal tumour, the colon being an anterior relation of the kidney.

(*c*) *Dulness* may be present in various situations—over an appendix, inflammatory mass, or an ovarian cyst, &c.

(*d*) *Free fluid* is often readily detected by the variation in the percussion note of a flank with varying position of the patient. But a shifting note may be found in cases of large distension of the colon.

(*e*) *The presence of free gas* in the peritoneal cavity. When a gas-containing viscus is perforated gas escapes into the peritoneal cavity, and finding its way between the diaphragm and the upper surface of the liver causes the appearance of a band of resonance, of varying extent, above the right costal margin. Much controversy has raged round this sign, but used properly it is most valuable. Osler, in a paper on perforation in typhoid fever, pointed out the value of this sign—the obliteration of the liver dulness *when occurring in a flat or not greatly distended abdomen.* With great distension of the intestinal coils the liver is pushed upwards and possibly rotated backwards on its transverse axis, with the result that the normal area of liver dulness is diminished or absent. With these precautions in our minds, the sign is a most valuable one. Shifting resonance from the presence of gas is also met with in the purely localised collections of pus and gas found in perforations of gastric or duodenal ulcers in the subphrenic regions. In these latter conditions a bell sound may also be met with.

Examination of Thorax.—Having thoroughly examined the abdomen, the thorax must be investigated. The condition of the lungs is of special importance. With much abdominal distension the bases of the lungs are partially collapsed, with impairment of air entry and resonance. The condition of the pleural sacs is important. The physical signs of fluid at the base of a lung, particularly if somewhat limited in extent, with a history of long-continued indigestion and a sudden onset of pain in the lower thoracic region, are very suggestive of perforation of a gastric or duodenal ulcer. As the fluid accumulates, the diaphragm is pushed up and the area of dulness and impaired air entry is further increased by the collapse of the base of the lung. Such signs, particularly in a young woman with history pointing to gastric ulcer, are almost pathognomonic of a subphrenic collection of pus. An exploring needle is not infrequently used for the purpose of ascertaining the character of the fluid. Occasionally clear, or very slightly turbid, serum is withdrawn, and I have several times seen this conjunction of clear or slightly turbid inflammatory fluid above the diaphragm with pus below, so that with a definite history of gastric trouble one must not be put off one's guard if the exploring fluid reveals clear fluid, for the point of the needle may be in the pleural cavity. Similar physical signs may be met with in the right axilla, due to a collection of pus between the right lobe of the liver and the diaphragm, or around the head of the right kidney, the result of perforation of a pyloric or duodenal ulcer, or of inflammation tracking upwards along the ascending colon from appendix disease.

Acute pulmonary or pleural disease, such as lobar pneumonia, broncho-pneumonia, pleurisy, empyema, and diaphragmatic pleurisy, not infrequently give rise to urgent abdominal symptoms, doubtless due to pain referred to the area of distribution of the lower dorsal nerves. There may be acute pain and tenderness in the epigastric and hypogastric regions, which with rapid shallow breathing and rapid pulse may so simulate an acute abdominal affection as to be the means of an unnecessary laparotomy being performed. The undue rapidity of the breathing, and the fact that the signs are in the upper abdomen, should compel a most careful examination of the thorax, which will usually reveal the presence of some such disease as above mentioned.

The heart should also be carefully examined, though it is very rare for cardiac or pericardial affection to simulate abdominal disease.

A *rectal examination* should never be omitted. It may reveal the presence of growth, or the apex of an intussusception; or tenderness localised to one side of the pelvis may be evident; or an actual inflammatory induration or mass may be felt.

Vaginal examination, of course, is still more valuable. The condition of the uterus, the ovaries and tubes, and of Douglas' pouch can be ascertained, as also unilateral or bilateral tenderness, depression of the fornix, and so forth.

The Stools.—The condition of the bowels before the onset of the attack will have been ascertained, whether normal, loose, or constipated. Constipation may be absolute, or the onset may be accompanied by diarrhœa, in some cases of appendicitis for instance; or blood may be passed shortly afterwards, as in embolism or thrombosis of the mesenteric arteries or veins; or blood may be mixed with mucus, as in intussusception. Shreds or long filaments of mucus or actual mucous casts are passed, with severe abdominal pain, in mucous colitis.

The urine is usually much diminished in any acute abdominal disease, the result, probably, of shock and of the large amount of fluid lost by vomiting. Indican is frequently present.

The Vomit.—Vomiting is one of the commonest features of the onset and course of acute abdominal disease. At the onset it is probably reflex and consists purely of the gastric contents; later it is bile-stained, and then brownish or coffee ground in type. The presence of the coffee appearance is not conclusive of hæmorrhage into the intestinal tract. Lastly, it may become extremely offensive, and is then known as fæcal or stercoraceous vomiting. This last is very characteristic of intestinal obstruction, and may certainly be met with in obstruction of the small intestine. In peritonitis the vomit is rarely so offensive as in obstruction.

The *Pulse* is nearly always increased in frequency; this applies especially to peritonitis, whether general or local. It is rapid, small in volume, and at first tense in character. A gradually increasing pulse rate is of grave import, and suggests a spreading infection. On the other hand, it not infrequently happens that at the onset, and for a few hours, the pulse is quick, the pain diffuse, and the abdomen rigid; but

as the initial shock disappears, the rigidity diminishes, the pain becomes localised to the right iliac fossa, for instance, and the pulse rate becomes slower.

In a case in which at the first examination no definite diagnosis can be arrived at, an increase in the pulse rate is one of the most important symptoms in settling the existence of grave disease. A pulse above 100 should always be regarded with suspicion.

The *Tongue* is always abnormal. It may shew a thick white fur or be brown and dry. The breath is usually foul.

The *Temperature* in acute abdominal disease varies greatly. In intestinal obstruction it may never rise above the normal; in peritonitis, whether local or general, it is nearly always above normal during some period of the illness. In the late stage of collapse in diffuse peritonitis it may be subnormal. The concurrence of a subnormal temperature with a rapid pulse is very ominous.

Retention of consciousness is a very marked feature in these cases. Delirium is uncommon. In fact, in the late stages of septic poisoning, with a running and almost imperceptible pulse, rapid respiration, and the cold sweats of impending death, the mental condition is often of the clearest.

We have now considered the methods of examination and the order of procedure with which we approach a case presenting acute abdominal symptoms, and our first duty is to endeavour to decide whether such may not be due to certain conditions which simulate gross abdominal disease. Of these the chief are:—

(1) *Lead Colic.*—In any such case as we are considering the gums should be carefully examined for the presence of a blue line, and the occupation of the patient ascertained. The pain of intestinal colic may be very severe. Valuable points are that it is often paroxysmal, frequently unilateral, and that the patient is commonly very restless; he may be found walking about bent double and writhing with pain. The patient with peritonitis, obstruction, or other serious disease, lies quietly in bed. In lead colic vomiting may be marked, but the abdomen is usually retracted rather than distended. Other evidence of lead poisoning may be present, such as anæmia, albuminuria, or a still more obvious wrist-drop.

(2) *The Gastric Crises of Locomotor Ataxy.*—In this condition

the pain may be very severe and the vomiting incessant. It should be an absolute rule to examine the knee-jerks and the pupils in abdominal cases. It goes without saying when a patient comes under observation with a foul tongue, a running pulse, a distended abdomen and a facies hippocratica, that he is not suffering from lead colic or gastric crisis, but it is in the first few hours of the illness that the difficulty presents itself. The converse error of mistaking acute disease for lead colic or gastric crisis is less common.

(3) *Acute Pleural or Pulmonary Disease.* — The precautions already mentioned under examination of the chest should prevent this error.

(4) *Biliary Colic.*—This occurs most commonly in people over the age of 30. The pain is severe, and paroxysmal, and commences in the right hypochondrium, though it may radiate over the whole abdomen. There may be a rigor with a temperature of 101° or 102°, and vomiting is common. A history of previous attacks is very helpful and the occurrence of jaundice almost settles the question, but it may not be present. The liver and especially the region of the gall bladder is very tender.

(5) *Renal Colic.*—The pain usually radiates from the loin along the course of the ureter to the groin, and there may be frequent and painful micturition with hæmaturia.

(6) *Symptoms of Obstruction due to Spasm of Bowel.*—This occurs both in males and females. They may present a history of constipation and of previous acute abdominal attacks, sometimes of hysteria and occasionally of mucous colitis. In the absence of such evidence diagnosis may be impossible, and laparotomy reveals nothing beyond the presence of portions of contracted small or large intestine.

Having considered and, if possible, excluded the conditions just enumerated, it becomes increasingly probable that we are dealing with a case of acute abdominal disease which may require operation. It is therefore necessary to proceed to consider the differential diagnosis of the various possible conditions. In the early stages a differential diagnosis may be very difficult, if not impossible, in view of the fact that any form of acute abdominal disease may produce at its onset that group of symptoms described by Sir Frederick Treves under the heading "Peritonism," viz., abdominal pain

and tenderness, with vomiting and collapse. The difficulty is further enhanced by the fact that the site of pain does not always correspond with the anatomical situation of the organ at fault, thus appendicitis frequently commences with pain referred to the umbilical region, or to the whole abdomen, but after from one to twelve hours the pain and other signs frequently localise themselves down to a particular area and the disease so declares itself. In a doubtful case allow an interval of an hour or two to elapse and then examine again, paying particular attention to the pulse as well as to the abdomen.

Also when in doubt avoid giving opium. This may be a matter of some difficulty in the presence of acute abdominal pain with the patient imperiously demanding immediate relief; but if there is doubt as to the presence of a severe intra-abdominal lesion, the administration of opium involves the great misfortune that the possibility of arriving at an accurate diagnosis may be delayed for several hours. The urgent question presented to us is whether acute disease is present or not. Such disease gives evidence of its presence mainly in two directions, firstly in the presence of certain physical signs, chiefly abdominal, and secondly by producing grave symptoms of shock. It is curious to notice in different cases how in some the physical signs predominate, in others shock; so much so that in rare instances peritonitis may be present with urgent abdominal symptoms and an almost placid face and quiet pulse, while in others the abdominal signs may be most equivocal, but the pulse and aspect indicative of serious disease. In either case the conclusion is to be drawn that serious disease is present, and inasmuch as such conclusion almost involves an operation, the importance of not administering such a drug as opium in a doubtful case is manifest. It can completely alleviate all symptoms of shock, and in addition so mask the abdominal pain and rigidity as to convey an erroneous assurance of safety.

Further, when seeing a case that has already been seen the question should always be asked whether opium has already been given. If so, a more guarded view should be taken of the case than it would otherwise seem to merit.

It is important to realise that the symptoms of onset may not be distinctive, but in some cases the history may give

a safe clue, safe, that is to say, within the ordinary range of probability; thus, with a history of previous indigestion and perhaps hæmatemesis, the occurrence of acute abdominal symptoms is almost pathognomonic of a perforated gastric ulcer. This in no way prejudices the fact that in some cases perforation and peritonitis may be practically the first symptom of gastric ulcer. Previous attacks of appendicitis would suggest that a recurrence had occurred, and the feasibility of delay, as a severe onset may speedily be followed by a comparatively mild and short attack. The diagnosis of obstruction may be confirmed by the history of past peritonitis, &c.

But there may have been no previous symptoms to throw any light on the condition, and the onset may be as already described, noncommittal. In such cases the utmost care must be taken. Every point must be carefully noted and weighed. It is in this early stage that operation yields such brilliant results.

It comes to this, that it may be quite impossible to make an accurate diagnosis, but quite possible to determine that some urgent mischief is in process, and that immediate operation is imperative. Such may be due to a perforation of a gastric ulcer into the general peritoneal cavity, peritonitis following a gangrenous appendicitis, some forms of ruptured extra-uterine gestation, acute strangulation, and so forth. In all these the symptoms and physical signs steadily grow worse, and it is our duty to endeavour to recognise early such a condition within the peritoneal cavity, even though, as has already been said, it may not be possible to be certain of the actual cause.

Owing to the similarity of symptoms, especially at the onset, it may not even be possible to say whether the case is one of peritonitis or acute obstruction.

If the constitutional symptoms are severe, if the facies is bad, if the pulse when first seen is, say, 100, and an hour or two later is rising, if vomiting is severe, and particularly if coffee-ground vomit appears, the case should be operated upon, diagnosis or no diagnosis. Further, the increasing severity of the abdominal signs are to be considered. It is certain that thereby many a life will be saved which otherwise would be lost. On the other hand a certain number

of abdomens will be opened for acute disease which would later have localised itself down into an appendix abscess, a gall-bladder abscess, a pelvic abscess, and so on.

Extraneous help may be derived from a consideration of the relative frequency of the various types of acute abdominal disease. Mr. E. M. Corner[1] and I collated all such cases admitted into St. Thomas's Hospital during the years 1900, 1901, and 1902. In all there were 456 cases, of which the relative proportions were: 37 per cent. appendicitis and its complications; 24 per cent. intestinal obstruction other than intussusception; 16 per cent. intussusception; 11 per cent. perforations of alimentary tract; 6 per cent. pelvic or gynæcological cases; 6 per cent. abdominal abscess other than appendicitis, and miscellaneous cases. Strangulated herniæ are not included.

Taking all ages then, we see that out of a total of 456 cases, no fewer than 168, or 37 per cent. were due to appendicitis. If we consider the age incidence of these cases of appendicitis we find another interesting fact. It should be mentioned that this series does not include mild cases not operated upon; they were all operation cases, or fatal cases not operable and confirmed by autopsy.

	Age in Years.							
	— 5	— 10	— 20	— 30	— 40	— 50	— 60	Above 60
No. of cases of appendicitis	3	14	84	44	6	12	4	1
	Below 10 = 17		10–30 = 128		Above 30 = 23			

We see that 128 out of 168, or 76 per cent. of the cases of appendicitis occurred between the ages of ten and thirty years.

So that considering that appendicitis forms actually 37 per cent. of all acute abdominal cases, and that 76 per cent. of the cases of appendicitis occur between the ages of ten and thirty, the chance regarded from the point of view of simple pro-

[1] See "The Surgery of the Diseases of the Appendix Vermiformis and their Complications," by W. H. Battle and E. M. Corner, p. 135.

bability of any case occurring between those ages being one of appendicitis is considerable. Perforations of the alimentary tract occur most commonly between the ages of fifteen to forty, but appendicitis is more than three times more frequent than all the varieties of perforation of the alimentary tract taken together.

If possible, the particular form in which appendicitis presents itself must be realised. From the point of view we are considering appendicitis forms four important types.

(1) Non-suppurative; with or without a local mass.
(2) With formation of local abscess.
(3) With local spreading peritonitis.
(4) With diffuse peritonitis.

The first group often gives rise to no anxiety as to diagnosis, It is not included in the table of figures.

In the second type the disease commences either mildly, or severely with diffuse abdominal symptoms, which, however, soon localise down to the right iliac fossa; but the symptoms, instead of shewing amelioration with fall of temperature in two or three days, persist, the mass increases in size, becomes extremely tender, and the temperature keeps up or rises again should it have fallen.

It is the third condition described as producing local spreading peritonitis which gives rise to the greatest anxiety. By this is meant that though the peritonitis is local there are no adhesions shutting the inflammatory process off from the general peritoneal cavity. The contact of the intestinal coils with each other and with the abdominal wall impedes the rapid spread of the infection, so that for a time it is local; but whether it will remain so by the production of definite adhesions, or whether none will form, it is impossible to predict. The most careful attention to the pulse, the temperature, the facies, and the abdominal signs as described, is imperative. In this type more than in any other, early operation saves life. A point of difficulty is that in such cases there is sometimes a fallacious appearance of comfort and calm, but it is in this type above all that the administration of opium is attended with grave risk. When the infection spreads rapidly over the peritoneal cavity the symptoms and physical signs of general peritonitis are produced.

Acute intestinal obstruction (not including intussusception)

formed 24 per cent of the cases in the series. It is not common until after thirty; it occurs with increasing frequency as age advances, and is most common of all between fifty and sixty. It is not possible to-night to enter into a discussion of the differential diagnosis of the various causes competent to produce acute obstruction. In the early stage, and particularly when strangulation is very severe, it may be impossible of diagnosis from peritonitis. Acute peritonitis is, however, more often mistaken for obstruction than *vice versâ*. Among the distinguishing points may be mentioned the presence of a rigor, which is not uncommon at the onset of peritonitis, but rare in obstruction. In peritonitis the temperature is raised at the beginning and may be high, though as collapse sets in the temperature very often falls. In very severe forms the chart may only show a rise at the onset. In obstruction the temperature is either normal or subnormal. Abdominal pain is not so severe in obstruction as in peritonitis, and pressure will occasionally relieve it. The abdominal wall is more flaccid in obstruction, and, indeed, the patient may take a deep abdominal breath. Percussion is painless in obstruction, very painful in peritonitis; also peristalsis may be visible in obstruction. But many of these points may fail us, particularly in the very acute forms of obstruction, such as strangulation by a band, and we have also to remember that obstruction is often speedily attended with peritonitis. Again, though in peritonitis the abdominal wall is rigid, it must be remembered that in the late stages with severe septic poisoning the abdomen may become quite soft and flaccid again. In the aged also intense general peritonitis may exist, and yet the abdomen be soft and mobile.

Intussusception formed 16 per cent. of the cases. It is a disease of infancy or early child-life. One word about the tumour. This when felt is practically diagnostic, though I have seen the right lobe of the liver and a mass of enlarged glands mistaken for it. It is important to examine the abdomen frequently, as the tumour, especially in its early stages, is often only palpable when the coils involved in the invagination are contracting. This is sometimes very obvious, the sausage-like mass melting away under the examining hand. The importance of this is that, once definitely felt, the subsequent disappearance of the tumour should be practically dis-

regarded, and operation, or at least examination under an anæsthetic, proceeded with.

Perforations of the alimentary tract formed 11 per cent. of the cases. The commonest perforation is of the stomach, next of the duodenum. The former occurs chiefly in young women, the latter mainly in men between the ages of thirty and fifty. The history of the case affords the best aid to diagnosis, but occasionally perforation occurs almost as the first symptom of gastric ulcer. The gastric contents frequently sink down into the pelvis, and there set up acute peritonitis, which may give an unduly pelvic aspect to the case, owing to the presence of much pus in the pelvis, with great vaginal and rectal tenderness.

The presence of free gas in the peritoneal cavity, as already described, is diagnostic of perforation of the alimentary tract. It does not occur in appendicitis.

Other perforations of the alimentary tract occur in the course of typhoid fever, and not infrequently in carcinoma of the rectum. Tubercular peritonitis is occasionally so acute in onset as to simulate peritonitis due to perforation.

The pelvic organs of the female are responsible for a certain number of cases of acute abdominal disease (6 per cent. of the series.) Subacute cases of pelvic inflammation do not concern us, but the most acute general peritonitis may be set up as the result of sepsis during or after labour, or of the rupture of a pyosalpinx, of the spread of infection up the fallopian tube in severe gonorrhœa, of suppuration occurring in an ovarian cyst, of torsion of the pedicle of an ovarian cyst, of sloughing of a fibroid, &c. Vaginal examination will usually yield evidence of the presence of an ovarian tumour, or of a pyosalpinx, and these may be evident on palpation of the abdomen.

There is one other pelvic condition which, unless diagnosed and treated speedily, is very apt to be fatal. This is a ruptured ectopic gestation. The onset of symptoms is sudden. They are those already enumerated—severe abdominal pain, rapid symptoms of shock, and usually vomiting. But to these peritonitic symptoms are added others. Firstly and most important are signs of hæmorrhage. The patient feels very faint, her face becomes increasingly pale, her pulse quicker and feebler. Finally she presents a picture of severe

hæmorrhage, with extreme blanching of face, extremely feeble and rapid pulse, restlessness, often yawning; and with these signs are those already alluded to—a painful, rigid, and perhaps distended abdomen. Per vaginam one may feel a boggy condition of Douglas' pouch, and I have noted the same feeling on pressure above the pubes, the sensation being that of a mass of blood clot. There is no rise of temperature suggestive of peritonitis. Finally, the history of the menstrual function is of the greatest importance. The rupture usually takes place early in pregnancy; it may be before a single period has been missed, in which case no help would be forthcoming from the history. More commonly, however, it is found that a period has been missed. With the onset a slight vaginal hæmorrhage may take place, which the patient usually believes to be due to the appearance of a delayed menstrual period or to a miscarriage.

Under the remaining 6 per cent. of the cases are included cases of intraperitoneal abscess of unknown origin, perinephritic abscess, cholecystitis, mesenteric thrombosis, and so forth. The diagnosis of some of the rarer causes of peritonitis is at times very difficult. In acute suppurative or gangrenous cholecystitis there is usually extreme tenderness beneath the right costal margin, or if it has diffused over the upper abdomen it may be more intense in the right side. A history of gall stones would be very helpful, but is not always forthcoming, nor is jaundice necessarily present. Acute pancreatitis commences with severe epigastric pain, vomiting and collapse. There will usually be an absence of the long history of indigestion, which would suggest duodenal or gastric ulceration. Thrombosis or embolism of the mesenteric arteries and thrombosis of the mesenteric vein are occasionally met with. The symptoms are those of very severe peritonism, and blood may be passed by the bowel.

It is impossible in a short paper like this to do more than point out methods of examination and to indicate very briefly the diagnostic points of acute abdominal disease. Time forbids a consideration of the minutiæ of differential diagnosis. Sometimes the diagnosis of the actual lesion is obvious, at others impossible.

The special features in any case vary greatly according as the patient comes under observation at the onset of the

symptoms, within a few hours of the onset, or still later. Age, sex, and the relative frequency of the various lesions are all useful points to consider. Promptness in recognising early that a serious intra-abdominal catastrophe has occurred will save many lives. In general peritonitis of whatever origin, and in intestinal obstruction, prospects of recovery diminish with frightful rapidity as time elapses.

When in real doubt, operation is usually advisable if only for purposes of diagnosis, for experience shows that the mistake of leaving a case too long is more common and fraught with far greater danger than that of exploring an abdomen with negative result.

MENTAL DEFICIENCY IN CHILDREN IN REGARD TO PROGNOSIS.

By C. H. Fennell, M.A., M.D., M.R.C.P.

The incidence of mental abnormality in children, usually the result of congenital causes, is so widespread that few practitioners go through a year without being brought into contact with one or two fresh cases, and confronted with the task of indicating to more or less exacting parents what degree of improvement, or the reverse, is to be looked for. Under such conditions the medical man may, through the recognition of certain features of the case, acquire considerable credit by his prognosis, while, on the other hand, the result of forecasting improvement with education, in, let us say, a case of juvenile general paralysis, will be certain to react unfavourably on his reputation. Unfortunately, few of us have the opportunity of studying the imbecile, save in isolated instances, and it is my object in this short article to suggest some data on which the outlook in any given case may be founded.

Amentia is met with in every grade, from the slightest aberration, manifest only to the trained observation of the expert, down to the most profound idiocy. But a division may be made into certain recognised types, of which not only the clinical features but also the course have something distinctive. A scientific classification of these types is difficult, and involves

much ętiological and pathological detail outside the scope of my subject. For my present purpose I shall group them as follows :—

(1) *Congenital*	(2) *Acquired*
Simple	Traumatic
Microcephalic	Inflammatory
Mongolian	Epileptic
Hydrocephalic	Organic
Sense-deprivation	Hypertrophic
Cretinism	Amaurotic family idiocy
	Juvenile general paralysis

This arrangement, as will appear subsequently, is purely one of expediency ; for an excellent classification, based on scientific grounds, the reader is referred to Tredgold's paper in Vol. II. of *Mott's Archives of Neurology*.

Before proceeding to deal with these groups in detail, it is necessary to indicate the lines along which possible mental improvement may run. In the imbecile, we have a being of arrested cerebral development ; the slightest cases of mental deficiency, generally speaking, show weakness of the higher activities ; in cases of medium grade we find, in addition, an incapacity for attention and simple reasoning power ; while in the most gross forms of idiocy the instinct of self-preservation seems more or less in abeyance. The various degrees show more or less analogy to the progressive stages of alcoholic intoxication. We must remember that we are dealing with an actual deficiency of working material in the brain ; we can apply the maximum of education to what we have got, but cannot create what is congenitally absent. Thus it is, in the vast majority of cases, futile to devise a scheme of training which will involve the task of mathematical reckoning and other ordinary school accomplishments. But when attention is turned to manual work, a varied field of training is opened up, and though it must be acknowledged that its chief benefit is usually to keep the patient out of mischief, much may be done in the way of teaching simple handicraft. I must protest, however, against undue optimism in this direction ; my experience among large numbers of imbeciles has been that, firstly, a very small percentage only of the higher-grade patients reach any competency in the arts of mat-weaving, basket-making, &c., even with skilful and expert handling ;

secondly, that their education up to this point is a slow and tedious business, while their accomplishments are forgotten in a surprisingly short time; and, lastly, that however well an imbecile may perform a given task, he will generally take three or four times as long to do it as a normal person. In imbecile institutions most "useful" patients find their métier in scrubbing, pulling a garden roller, folding clothes in the laundry, and similar employment: a very few only are of real use in the needle-room, or bootmaker's shop.

In cases bordering on the lowest grade we are met by the problem of teaching habits of cleanliness and persona attention, and here skilful nursing will effect a good deal. Such cases are often complicated by varying degrees of paralysis, which may be dealt with *secundum artem* by massage and exercises.

The simple congenital imbecile—the typical "village idiot" with whom all are familiar—undersized, coarse of feature, heavy of expression and clumsy of movement, is perhaps the most promising as regards manual education, and it is from the ranks of such that most of the usefully employed are recruited. In the case of the microcephale, easily recognisable at sight, we meet children who are often bright, lively and attractive, with considerable imitative faculty and quaint manners; it is precisely in these cases that much caution should be exercised in foretelling the future. These patients as a rule afford but little result from education; their powers of attention are notably deficient, and their winning ways often raise hopes of educability that are doomed to complete disappointment. The same has been my experience, to an even greater degree, with the Mongol type, so outstanding by reason of the slanting eye-slits, brachycephaly, and fissured tongue. In a somewhat close study of this variety, I have not encountered a single well-marked case in which the mental powers, always of low grade, had shown any capacity for much useful training. If a Mongol can be taught the simplest household work, it is an achievement.

In the case of hydrocephalic imbeciles, a distinction, prognostic as well as pathological, must be drawn between the congenital cases and those due to acquired disease. The former are, as a rule, much more amenable to development, and I have noted mental capacity in such a case far in excess

of what the head circumference—23 inches—might have suggested. The acquired cases—especially when the outcome of posterior basic meningitis—are most intractable.

Imbecility from sense-deprivation—those conditions of deaf-mutism and of blindness in which the mental weakness is purely the result of the blocking of pathways for external impressions, is, as might be expected, susceptible of striking improvement with suitable attention. Here, however, a difficulty arises, in that it is no uncommon thing for a child of congenitally deficient brain to be also the subject of such a shortcoming. I have two cases of deaf-mutism in mind, in which a distinct substratum of antenatal mental defect exists, and in which small progress has been made in education. The possibility of this coincidence must always be borne in mind.

The results of thyroid treatment in cretinism are too well known to call for allusion here. It is only necessary to remark that even adult age should not in itself preclude the use of the remedy, as in a case—that of a woman of 35—at present under my treatment, I have noted marked improvement, both in mind and body.

To turn to acquired amentia, it may be said that, in general, the outlook is far less favourable than in the congenital forms. In cases due to trauma and to inflammatory brain disease, improvement is seldom to be looked for, and never much pronounced. Progressive mental enfeeblement is more often the outcome.

Epileptic imbecility in the true sense of the term. *i.e.*, dementia caused by acquired epilepsy, naturally depends to a great degree for its prognosis on the severity of the seizures, and on the extent to which they can be controlled by treatment. The frequency with which epilepsy complicates all varieties of imbecility must not be overlooked. Again, in the mental effects of cerebral tumours we are dependent on the progress of the gross lesion; it should always be borne in mind that tubercular growths in the brain, by no means uncommon in children, are liable to periods of obsolescence, during which much apparent mental and bodily improvement may occur, though the ultimate prognosis as regards life is generally bad.

Instances of hypertrophic idiocy—the result of neuroglial

overgrowth, in which the enlarged skull is square or elongated, and especially broad above the superciliary ridges, in contrast to the hydrocephalic shape—are very uncommon, and are hardly amenable to improvement. The condition is not always easy to distinguish from hydrocephaly; indeed, in one case which had been demonstrated for years as possessing the typical cranial features of the hypertrophic, I found, *post-mortem*, hydrocephalus with no increase in white matter.

Amaurotic family idiocy, comparatively rare as it is, deserves special mention on account of its certain termination in gross idiocy and eventually in death. Its appearance in the first two years of life, the progressive paralysis and blindness with changes at the fundus, and the family type of its occurrence among Jews, should leave no loop-hole for doubt in diagnosis.

The early recognition of juvenile general paralysis is, without question, the most important problem to grasp in all dealings with the weak-minded. Here, again, we have a condition, insidious in onset, and invariably leading to increasing mental and bodily enfeeblement, and ultimately to death. Although in the majority of cases the disease occurs in patients previously normal, we must realise that it may complicate the course of a case of congenital imbecility, and entirely alter its future. Its existence should always be suspected in cases of progressive mental and bodily failure, especially when occurring about the time of puberty or in the succeeding few years. I have, however, had a case in which the symptoms developed at the age of six. The physical signs are those of the acquired form: altered knee-jerks, Argyll-Robertson pupil, tremors of tongue and face, slurring speech, and deterioration of handwriting.

Epileptiform seizures are common throughout the disease. delusions are rare; I have met with few well-marked instances; ideas of grandeur are still less common. Dr, Mott has suggested to me that the child, whose thoughts have before onset run in other grooves than those of money-making and personal advancement, is consequently unlikely *à priori* to develop megalomania. If, in addition to the features detailed, a history of syphilis in the parents can be obtained or presumed, the diagnosis is fairly well established. The absence of syphilitic stigmata should never obscure it, as in a family

several of whom show physical signs of congenital taint, the one child who developes general paralysis is not infrequently unmarked.

Two points of general application remain for mention. In the first place, as Tredgold has pointed out, the mentally deficient subject is more prone than others to attacks of acute insanity, and this fact should be held in view in forecasting tho future. Secondly, imbeciles seem to have a special predisposition to tubercular infection, and Ireland has estimated that two-thirds of all cases eventually succumb in this way. The mortality from phthisis is especially large in the Mongol type.

The advisability of segregation should always be impressed on relatives, with the explanation that, although in most instances the patient's intellect can be but little developed, his interest will be better safeguarded by expert control than they could be in home life. The most highly trained weak-minded lad, capable of at least partial self-support, cannot fight the battle of life among the normally-equipped, or look after the money he earns; the sexual instability of the girl imbecile bespeaks constant supervision for her; and the ranks of mental cripples afford a fertile recruiting ground for the criminal classes.

In general, our aims in pronouncing on the future of any given case should be, firstly, to avoid overlooking signs of certain deterioration; and, secondly, while explaining to the friends the impossibility of replacing the brain-substance by fresh material, to indicate in what directions, if any, the mental and physical condition may be bettered.

Jassy Goldenstein reports a case in which he delivered a woman of 40, who had had eight normal labours, of a macerated fœtus 51 cm. long. The patient had severe pains, passing off in a few hours, three months previously, and since then had missed the movements of the child. During the three months she had had no vaginal discharge, she had been able to do her work, not suffering in any way, and only sought his advice to be quit of uncertainty as to her condition.—*Zentralb. f. Gyn.*, 1904, No. 26.

ON HEAD INJURIES.[1]

By STEPHEN PAGET, F.R.C.S.

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GENTLEMEN,—Let me try to put before you the difficulties and uncertainties which attend severe injuries of the head. It may be said of them, as a great surgeon once said to me of abdominal cases, "The more you see of these cases, the less you know about them." There are, it is true, some surgeons able to estimate and interpret all the symptoms of a bad head-case, able to give the exact reason why they operate in this case and not in that case; but, for myself, I never come to the bedside of one of these cases without longing to understand more clearly the state of things inside the patient's skull.

Three questions, to begin with, demand some sort of answer from us when we are called to a head-case; and they have to be answered at once, as we stand there by the bed. They are:—

(1) What has happened to the skull?

(2) What has happened to the brain?

(3) Ought I to operate?

These three questions come in that order when we first see and examine the patient; but that is not the order in which they ought to come. Our first thought and our chief anxiety should be not for the skull, but for the brain. Let us re-arrange the three questions, thus:—

(1) What has happened to the brain?

(2) Is there a fracture of the skull?

(3) If the skull be not fractured, or anyhow be not depressed, ought I still to operate for the sake of the brain?

That is the right order of the questions which we must ask ourselves when we are summoned to a bad head-case. We must put the brain first, and the skull second. Surely you will admit, Gentlemen, that we are sometimes in danger of thinking too much about the skull, and not enough about the brain; we are too ready to believe that the patient will recover

[1] A Post-Graduate Lecture at the West London Hospital.

because the skull is not fractured, or anyhow not depressed; we are too ready to believe, if the skull is fractured, that we shall do good to the patient's brain by an immediate operation on his skull.

Take one example of the harm that comes of thinking more of the skull than of the brain. Not a summer passes but there are three or four deaths at cricket from a blow with a cricket-ball over the middle meningeal artery. The blow may not be severe; there may be no fracture or, anyhow, no sign of fracture; the boy may walk off the ground, feeling only a little sick and giddy, and may lie down on his bed and drop off to sleep. A few hours later he is found unconscious, perhaps hemiplegic, with slow pulse and stertorous breathing; and he dies, before anything can be done, with a big clot of blood compressing his brain. If, in all such cases, we always thought first of the brain, and always tried by careful imagination to see through the skull and fix our thoughts on the structures that it covers, there would be a life saved, now and again, by the immediate use of the trephine.

Take another point of view to illustrate the importance of giving the first place in our thoughts to the brain. Suppose, for the moment, that our skulls were absolutely unbreakable, as hard as adamant; that no amount of violence could even crack them, much less depress them: that there was no such thing as a fracture of the skull. What difference would it make? How many lives would it save? It would not prevent rupture of the middle meningeal artery, or hæmorrhage into the substance of the brain, or laceration and ploughing-up of the surface of the brain; nor would it prevent, at a later period, softening of the brain or inflammation of its coverings.

Take another point of view: take the group of cases which we call, rather vaguely, fractures of the base. Are we not in danger here of thinking too much about the skull, and not enough about the brain? We have a sort of picture in our minds of a brain suddenly exposed to the invasion of all kinds of septic organisms; we assume that we are dealing with a compound fracture, which we cannot reach or cleanse or save from infection. And it is true that a fracture of the base does, as a matter of anatomy, render infection possible. But I doubt whether all, or even most, of the fatal cases of fractured base die that way. They are not killed by the crack just

running into the sphenoid bone, they would have died anyhow, even if their skulls had been as hard as adamant. It is the base of the brain, not the base of the skull, that we must put first in our thoughts. The violence which breaks the base of the skull, bruises or lacerates the base of the brain; and the course of the case, and the issue of the case, are determined by the injury done to the brain. In such cases of fractured base, we are not dealing with a healthy brain suddenly exposed to infection, we are dealing with a brain suddenly bruised or lacerated; and the fissure across the base of the skull is not the one cause of the death of the patient. Of course, in practice, we must do our best to prevent infection; we must cleanse the ears, if there be any bleeding from them, and we must treat the case as a case of compound fracture, dressing the ears carefully with cyanide gauze, and so forth. But we must fix our imaginations on the brain more than the skull; we must remember that the brain is injured, that the patient will probably die, that his death is more likely to come from the bruising or laceration of his brain than from the crack through his skull; and that a scrap of cyanide gauze in his ear will have no action on a hæmorrhage at the base of his brain.

I hope, Gentlemen, that I am not wasting your time with all this talk about putting the brain first in our thoughts, and the skull second. I do believe that we are in danger, sometimes, of putting the skull first and the brain second. We are too ready to think that we cannot do anything for the patient unless we can trephine him; we are not sufficiently careful to use our imagination, to observe with the mind's eye what is happening under the unbroken skull. If we cannot see our way to trephining the patient—if there is no indication where to trephine, or why to trephine—what else may be of advantage to the patient? We give calomel, we apply cold to the head: it is the right thing to do, but it does not take us far. We can bleed the patient; and I do believe that a timely venesection may indeed save a life. I have a very vivid remembrance of two cases, where it was impossible to doubt, as we watched them, that recovery was directly due to bleeding, and to that alone.

Bleeding for the relief of head-injuries was so abused by our forefathers that it fell into disuse. For one instance out

of many of the abuse of bleeding, take a case reported to the Royal Medico-Churirgical Society by Mr. Copland Hutchinson in 1813. The patient had a fracture, but the depression was so slight that he was not trephined. For some weeks after the accident he was subject to attacks of headache and giddiness; and for these he was bled. Mr. Hutchinson says: "These attacks called for so frequent a recourse to the lancet, that on adding up, from his prescription ticket, the whole quantity of blood withdrawn at these different bleedings within the first three weeks, I found it to amount to nearly two hundred ounces, without taking into the calculation the quantity procured by the repeated application of leeches to the temples." That is a fair instance of the abuse of venesection; and we are not likely now to agree with Mr. Hutchinson when he says: "I cannot omit to urge the necessity of copious blood-letting, in the first instance, in all affections of the brain arising from external injury, *concussion not excepted*." Still, as one reads the records of cases in Abernethy's work on "Injuries of the Head," published in 1810, one comes again and again to cases where venesection did, beyond all doubt, help to save a patient's life.

But what are the indications for venesection, and when do they show themselves? Set aside those cases where the use of the trephine is indicated: take only those cases which show no evidence of fracture, or anyhow no evidence of any attainable compression of the brain, either by splintered bone or by effused blood. In such cases, where there is nothing to guide us to an immediate operation, what are the indications for venesection? Perhaps an immediate moderate bleeding, say from eight to ten ounces, would be justified in most cases of very severe concussion, or of fractured base. But the cases which are most likely to be improved by venesection are those where the patient, on the second or third day after the injury, is worse instead of better. His pulse is rapid and forcible, his breathing is quickened, his temperature is raised, he is rather flushed and rather restless. This condition used to go by the name of inflammatory fever, and it was the patients in this condition who got most advantage from venesection. But since cases in practice are seldom so typical as cases in books, I venture to suggest to you that we must not always wait till a patient shows every one of these symptoms. We

must have some rule that is not too rigid or too elaborate: and I think it would be a fair rule to bleed a patient who, not offering any opportunity for the trephine, and not being too feeble to stand the loss of a little blood, is on the second or third day after the injury worse all round, instead of better all round. The bleeding in such a case cannot do harm, it is almost sure to do good; and, if it does good, it can be repeated a day or two later.

I apologise for that slang phrase, "worse all round," but it does cover those cases where bleeding may be necessary Say that a man is admitted here on Saturday night, having fallen downstairs while he was drunk; say that there is some evidence, but no proof, of a fracture of the base. By Sunday night he seems a little better; the drink, and the shock, and the concussion, seem to be passing off; his bowels have been freely opened, his pulse and breathing are better than they were on admission, his temperature is normal, or below normal. But on Monday he is not so well; pulse, respiration, temperature, and mental condition, all show a slight change for the worse. You have watched him very carefully all along, and you begin to feel sure that he is suffering not only from concussion but also from laceration of the brain; you guess that the brain is bruised and congested, and in urgent need of immediate relief and rest for a time. You would rather not trust to morphia, you do not see why you should trephine him, or where you should trephine him, and you have already purged him. But if you bleed him at once to 8 or 10 ounces you do relieve him; you give rest and, as it were, drainage, to the damaged tissues; it is only for a time, but it may in this or that case just be the first step toward recovery.

Let me now say something about those cases where we do trephine; but let me first sum up the points already considered. First, all cases of head-injury are, to the average surgeon, cases of the utmost uncertainty and difficulty. Next, our best chance of doing the right thing is to put the brain first in our thoughts, and the skull second; to fix our imaginations hard on what our senses cannot tell us, remembering that all the ordinary injuries of the brain would still be possible, even if the skull were as hard as adamant. The importance of setting our thoughts principally on the brain

is illustrated by every case of ruptured middle meningeal, and every case of fractured base; it is illustrated, also, by the good which is sometimes done by venesection in cases which offer no indication for the use of the trephine.

Now, for ten minutes only, let us consider the indications for trephining, and the practical rules for the operation. I need not say that the use of the trephine is not now so dangerous as it used to be; and that it does not, of itself, increase the danger if we also incise the dura mater. Times are changed since John Bell, a hundred years ago, said "I will not disguise from you that this operation of puncturing the dura mater is sometimes successful, that it is reported so by creditable authors, but it is my duty to warn you that I have always found it fatal." We have got rid of our dread of the operation; but we have not got rid, and never shall, of the difficulty of knowing, in this or that case, when to trephine, and where to trephine, without any external wound to guide us.

To clear the way, put aside two sets of cases. First, put aside the head-injuries of infants. I have never yet trephined a baby's skull, and have never come across a case where the operation would have saved the infant's life. The skull, in the first year, is so thin and so elastic, its parts are so loosely joined together; it is so hard to estimate the meaning of the baby's symptoms, or to guess at the amount of harm that has been done; it is so easy, in the attempt to save a baby's life, to snuff it out; it happens so often that a baby who seems dying, and probably would die if you operated on it, recovers if you leave it alone—that I have never had a case of head-injury during infancy which clearly demanded the immediate interference of a surgeon, nor have I ever found, *post-mortem*, that an operation would have been of any use. The youngest patient, so far as I know, whose life seems to have been saved by trephining, was Dr. Haynes' patient, aged 2 years and 5 months. You will find the case recorded in that best of all our books, Jacobson's "Operations of Surgery." Next, put aside those cases where a septic wound of the scalp, still unhealed, or only just healed, sets up septic inflammation of the bone, which sets up diffuse septic meningitis. These cases were not very rare in the time of Perceval Pott, whose name is associated with them; but they are of the utmost rarity now.

I cannot remember that I have ever had a typical case of "Pott's puffy swelling." They are a form of acute septic osteomyelitis, such as we see often enough in the long bones of young people; they demand the immediate use of the trephine, and they mostly end in death from acute diffuse septic meningitis. They may be almost impossible to cure, but they cannot be very hard either to diagnose or to treat. The fear may be lest one should mistake a harmless hæmatoma or a mere transient œdema for a true "Pott's puffy swelling." Anyhow, if a patient some days, or even some weeks, after a scalp wound shows those constitutional and local symptoms which are suggestive of acute septic inflammation of the bone which underlies the scalp, and of the dura which underlies the bone, we must immediately make a very free opening through the infected bone, which is all infiltrated with pus, just as we make a free opening into the shaft of a long bone which is infected with acute osteomyelitis; and we must hope, but without much confidence, that the free exposure of the infected dura will be in time to save the patient from dying of acute septic meningitis. If there be septic fluid under the dura, so that it bulges and does not pulsate, the dura also should be opened, but without any hope that the patient will recover.

We have now put aside all cases of head-injury in infancy, and all cases of acute osteomyelitis of the skull. There remain the ordinary cases, where we trephine either to raise a depressed fracture or to find and remove a blood-clot which is compressing the brain. Take first these cases of compression. What indications do they give? We must not expect all the classical symptoms—the loss of consciousness, occurring after an hour or two of comparative clearness of mind, and rapidly deepening; the slow pulse, getting slower; the stertorous breathing, getting weaker; the dilated and inactive pupils; the loss of power on the opposite side, going on to complete paralysis. Some of these signs may be absent, and those that are present may be obscured by the signs of concussion, or drink, or both. Still, we may find reason to be sure that we ought to trephine at once. Remember that we may, as a rare exception, find the compressing blood-clot not external to the dura, but beneath it. Such a case, published by Mr. Herbert Allingham, is recorded in Jacobson's

book. And I do urge you, gentlemen, to study that book hard; there is nothing like it, you find in it a perfect commentary on all operations; it is valuable past all telling. And, in all Jacobson, there is nothing better than the account which he gives of these cases of compression, and of the difficulties and dangers which the surgeon may have to face when he is dealing with intracranial hæmorrhage.

Finally, take those cases where we trephine to raise a depressed fracture. Three facts are to be borne in mind here. First, that the operation of trephining is not of itself dangerous to life. Next, that the damage done by the injury is done mostly to the inner table of the skull; it would probably be true to say that the splintering and driving inward of bone is twice as bad for the inner table as for the outer table. Lastly, that there may be hæmorrhage beneath the fracture. For these three reasons we may fairly make it a rule, that if we examine a wound of the head and find a fracture running out of reach of sight and touch, and if that fracture be ever so little depressed, then we ought at once to expose it freely, turning down a large curved flap after the method which Sir Victor Horsley taught us; and we shall, in nine cases out of ten, find the state of the bone worse than we had expected. With regard to the application of the trephine, that is a good rule which Holden gave, "Think that you are operating on the thinnest skull ever seen, and thinner in one part than another." Of course, in a case of emergency, if you have not a trephine you may be able to free and raise a depressed bit of bone with an elevator only, or by the help of a chisel, or a bone-forceps; but this is not always so easy as it sounds, nor so safe. Be prepared to find the internal table of the skull broken far and wide, with fragments loose and shifted this way and that. Do not be afraid of a free operation; make a big flap, and do not shrink from leaving a big hole. Drain your wound, either from the lower angle of your flap, or through the original wound of the scalp; and remove the drain early. Some of you may remember two cases not long ago—one of them a motor accident, the other a blow with a hammer—where the lines of the fracture were so extensive that the amount of loose bone which I removed was a cause of some anxiety to us: but I believe that it was just to this freedom of operation that the patients owed their lives.

Reports of Proceedings.

ORDINARY MEETING.—October 7, 1904.

C. M. TUKE, Esq., M.R.C.S., President in the Chair.

The following gentlemen were elected members of the Society: Charles Wm. Browne, M.R.C.S.Eng., L.S.A., Taung, Brit. Bechuanaland, S. Africa, and 75, Addison Gardens, W.; William Hesketh, M.D., C.M.Edin., 25, St. John's Crescent, Cardiff; Anghel Gaster, M.D.Bucharest, M.R.C.P.Lond., 68, Greencroft Gardens, West Hampstead, N.W.; H. Compton Parsons, M.R.C.S.Eng., L.R.C.P.Lond., Post Graduate College, West London Hospital, W.; H. J. F. Simson, M.B., C.M.Edin., M.R.C.P.Lond., F.R.C.S.Edin., 80, Brook Street, W.; Clarence E. Wigan, M.D., C.M.Aberdeen, 24, Cheyne Walk, Chelsea, S.W.

The PRESIDENT delivered his address entitled "Progress in Psychology," which was published in full in the October number of the Journal.

Dr. J. HERBERT MENZIES: On behalf of the members of the Society, I gratefully accept the privilege of proposing a vote of thanks to our President for his able and refreshing address. May I for a moment sound a personal note by saying what a pleasure it is to me to do so, as I have enjoyed a long friendship with him and his family? I know that it has long been the wish of the Society that its presidential chair should be filled by a psychologist, and I am sure that no more fitting representative of that branch of medical science could have been chosen. You, Sir, have given us a most interesting review of mental diseases, and traced the development of its treatment from the dark ages of superstition and cruelty, to the present-day exercise of refined and kindly control, with a result most favourable to the recovery of a fair percentage of cases. To me, and I expect to many others, you have given surprise by your many references to the early classic writers. I have the greatest pleasure in proposing this vote of thanks, and wish you a very happy year of office.

Dr. J. BARRY BALL: I have much pleasure in seconding this vote of thanks. The subject with which the President has dealt in this address is one of great interest to all of us, and he has handled it in a manner that only one with his wide knowledge and long experience could have done. I should like to take this opportunity of congratulating Mr.

Tuke on his advent to the chair of this Society. He is an old member and has always taken a great interest in the work of the Society, and has made valuable contributions to its proceedings. We must all wish that his year of office will be a successful one for the Society, and I feel sure that nothing will be left undone by Mr. Tuke to make it so.

ORDINARY MEETING.—Clinical Evening, Friday, November 4, 1904.

Mr. C. M. TUKE, President, in the Chair.

The following gentlemen were elected members of the Society: Harold Balme, L.R.C.P.Lond., M.R.C.S.Eng., 33, Short's Gardens, Endell Street, W.C.; Walter P. Cockle, M.D.Dublin, 1, Elm Villas, Ealing Green, W.; Thomas Fleming, M.D.Glasgow, 42, Harley Street, W.; Charles S. Humphreys, M.D.Brux., 85, Gunterstone Road, West Kensington, W.; Thomas Walcot, M.D.Edin., Camberley, Surrey; John Home Wilson, M.D.Aberdeen, 7, Ladbroke Square, W.

A Case of Keloid.

Dr. P. S ABRAHAM: This is a remarkable case of keloid in a man, who was terribly burnt in a gun-cotton explosion at Woolwich some two years ago. The face, head, neck and hands are principally involved, and there is extensive loss of tissue, and hideous scarring. The keloid has especially developed on the cicatrix about the lower jaw on each side, forming large masses hanging down. I here show photographs of the man, one taken two months before the accident, and others quite recently, and unless the facts were so certain it would be difficult to accept the photographs as representations of one and the same person.

A Case of Soleroderma with Unusual Features.

Dr. P. S. ABRAHAM: This is a woman, aged 55. According to the history she gives, she suffered from pains in the knees about a year ago, she then noticed that the skin below the knees was smooth and glossy. About six months ago several large blisters came upon the smooth skin, some of which broke and left extensive ulcerations. She had an attack of shingles on one shoulder two years ago. When the woman came to the Skin Department of the West London Hospital in September, the scleroderma was well marked, especially in front below both knees, and at the sides over the calf, there

were several very large bullæ, one of them as large as a turkey's egg, which she stated had been there for several weeks. There were also on each leg, areas of extensive ulceration, which she stated had also appeared on the smooth skin. If the history she gave is accurate, the case is very remarkable and perhaps a unique one. Bullæ and ulceration do not occur on sclerodermic integument, although scleroderma may be preceded (rarely) by bullæ, and ulceration may ensue, especially about joints, as the result of interference with nutrition by pressure of the contracting scleroderma. In this case, however, the bullæ and ulcers are over soft parts where no such pressure effects are possible.

Keloid.

Mr. J. PARDOE: In examining Dr. Abraham's interesting case of keloid after injury, it struck me very strongly that in addition to the keloidal condition of the skin wounds there is an immense amount of solid œdema—and by this I mean great interference with the capillary lymph channels, causing almost stasis of lymph flow in the parts. Dr. Abraham did not touch upon this point in his remarks and I should be glad to hear his views as to treatment directed to this condition.

Tabes Dorsalis with Gastric and Laryngeal Crises.

Dr. A. E. RUSSELL: This patient is aged 42. No history of syphilis is obtainable. His symptoms have come on in the past two years. He is very ataxic and the movements of his upper extremities are also much affected. There is marked loss of knowledge of position of both upper and lower limbs after passive movement. His knee jerks are absent; his pupils are very contracted and show the Argyll-Robertson reaction. He has suffered greatly from lightning pains and from severe gastric crises. The latter are associated with much vomiting, and are very resistant to treatment, antipyrin and antifebrin giving little or no relief. There is well-marked ulnar anæsthesia, which extends up the arm and across the thorax. The finger tips are all anæsthetic. The lower limbs show only slight blunting of sensation. The sphincters are unaffected. There are no trophic lesions.

Dr. ANDREW ELLIOT: I have only one remark to make in connection with this case, as I am responsible for the statement on the agenda paper that this patient has suffered from laryngeal crises. He has recently been an in-patient in the West London Hospital and while in the ward he gave a history of certain attacks of difficulty in breathing from which he had suffered at irregular intervals. These attacks occurred

generally in the night, lasted a variable time and were characterised chiefly by inspiratory dyspnœa. They were apparently very severe, and the patient was evidently much alarmed by their occurrence. There were none of these seizures during his stay in hospital, so that we have no confirmatory evidence. But from the patient's description I am inclined to regard them as true laryngeal crises.

Mr. G. A. GARRY SIMPSON: Abductor paralysis of the vocal chords may be the first and for a long time the only indication of commencing locomotor ataxia. In some cases of tabes with abductor paralysis the pulse rate remains abnormally frequent.

A Case of Tremors.

Dr. A. E. RUSSELL for Dr. A. P. Beddard: This patient is aged 27. He went through the siege of Ladysmith, where he suffered from typhoid fever and severe attacks of dysentery. At the relief of the town he was in bed with typhoid, but got up to join in the welcome, and on the next day the tremors appeared. They lasted for six months and since then have at times completely disappeared for some weeks at a time. The tremors involve the hands chiefly, but also the head, and to a lesser extent the lower limbs. His knee-jerks are normal, there are no ocular conditions, and nothing to suggest disseminated sclerosis. The tremor is regular and fine and essentially not "intentional" in type. From its mode of onset and the absence of other symptoms indicative of organic disease the condition is probably functional in origin.

A Case of Myositis Ossificans.

Dr. A. E. RUSSELL for Dr. A. P. Beddard: This patient is a man of 37. Since the age of 7 his muscles have slowly and progressively developed bony growths. These are to be felt in his muscular system in innumerable positions. Some of the bony masses are moveable within the muscle, though the majority are fixed, having developed apparently in the tendons and insertions of the muscles. There is therefore a great impairment of the movements of the various joints—so much so that ankylosis has occurred to such an extent that he is absolutely helpless. With the exception that he is quite bed-ridden, his health is fair. The condition conforms to the rare disease known as myositis ossificans. There is no history of it having occurred in any other member of his family.

Mr. A. BALDWIN: It is possible that there is some relationship between this disease and pseudo-hypertrophic paralysis, also hæmophilia, as they all three appear to be congenital

and hereditary, and to be transmitted through the females of a family to the males.

Dr. A. GASTER: I should draw the attention of the Society to the fact that the first case described is only the ordinary description of locomotor ataxia. The question whether it was syphilitic in origin is not proved by the fact of the patient having had gonorrhœa, as cases of tabes appear without syphilis and no anti-syphilitic treatment was tried. The second case *might have* been Thomson's disease. With regard to the third case, I have a family in which the father and grandfather had myositis ossificans and the three sons suffered from the same illness. Mother and daughters (two) were free from it and two sons have two daughters (babies) without a trace of the disease. I think it is a case of heredity.

A Case of Tabes Dorsalis with Charcot's Disease.

Mr. ASLETT BALDWIN: This patient, a man, aged 34, has a history of gonorrhœa, but no other venereal disease. When at work he was a railway porter. In the year 1900 he had a slight injury to the left foot, caused by tripping over the root of a tree. In 1901 he had a similar injury to the right foot. After the "sprains" the feet commenced to swell in the tarsal regions, the enlargement has been slowly progressive, but is considerably more marked in the right foot. He could walk very well until August of this year, when the right foot suddenly commenced to twist inwards, necessitating the wearing of a boot with side irons to keep the foot straight. The pupils do not react to accommodation or to light, and the knee-jerks are absent. The patient reels with his eyes shut and feels as if standing on something soft with the right foot, has considerable loss of sensation in both feet most marked in the right, gets shooting pains in the feet and tenderness on inner side of the right tarsus. Both feet show considerable and irregular bony enlargement in the tarsal regions, the malleoli on both sides are enlarged and apparently forced apart considerably. The right foot allows considerable movement from side to side and is partially dislocated inwards, this came on suddenly last August and necessitates his wearing the apparatus for walking. The ligaments of the left foot and ankle have not given way. The circumference of the right tarsus is 15½ inches, that of the left is 12½ inches. The legs are the same length. The prognosis is bad, the ligaments and bones will probably further give way under the man's weight, leading to further deformity and disablement. The bony changes are those most commonly found in this disease, viz., bony hypertrophy about hinge-like joints, whereas atrophy is most marked about ball and socket joints, although the latter has now commenced in the right foot.

A Case of Clonic Spasm of Soft Palate.

Mr. GARRY SIMPSON: The patient with clonic spasm of the soft palate is unmarried, aged 40. Twelve months ago she recevied a shock, owing to the sudden death of a brother, and shortly afterwards these contractions of the velum palati started and have continued ever since. At present they are at the rate of 60 per minute, and are accompanied by a clicking sound, audible to the patient and those around. I have been unable to discover any source of irritation in the nose and pharynx. The muscle principally involved is the levator palati, which is supplied by the facial nerve, through the connection of its trunk with the vidian by the petrosal nerves. Bernhardt has published a similar case in which the contractions were at the rate of 120 per minute. I am giving her pot. bromidi and intend trying the application of the galvanic current. There has been no regurgitation. We are indebted to Mr. Pardoe for this very interesting case, for she first consulted him at St. Peter's for floating kidney, and he kindly sent the patient to the throat department of this hospital.

A Case of Pharyngomycosis Leptothricia.

Mr. GARRY SIMPSON: With regard to the patient suffering from pharyngomycosis leptothricia. She is married and aged 27. Her attention was first drawn to her throat by a constant disagreeable taste. On examination the crypts of the tonsils were seen to be occupied by adherent chalk-white almost horny excrescences, without any surrounding inflammatory changes. The disease is associated with the leptothrix fungus, a specimen of which I have shown under the microscope, but whether this fungus which is always present in decayed teeth and tartar is the exciting cause I am unable to say, as opinions differ on this point. Possibly the leptothrix forms a nucleus in the tonsillar crypts and accumulates altered epithelial cells and débris, much in the same way that some tonsillar calculi are formed. The disease generally occurs in those who are run down in health, and is very chronic and difficult to cure; for instance I have tried the constant application of 1 in 20 carbolic, 1 in 1,000 hyd. perchlor., and iodine and pot. iodid., recommended by Dr. Ball, in whose book there is a very lucid description of the disease. These cases get well of themselves in time, especially if a tonic treatment is prescribed with change of air. I am giving this patient iron and strychnia, and intend applying the electric cautery to each crypt. In chronic lacunar tonsillitis the crypts are filled with soft yellow evil-smelling plugs, which can be squeezed out, or brushed

off, differing greatly from the hard white almost horny deposits of pharyngomycosis leptothricia.

Mr. BALDWIN: I heard of a case a short time ago which had greatly improved after treatment by Turkish baths, given because the growth of cultures of the organism present is greatly retarded, or stopped entirely, by slight elevations of temperature.

Dr. J. BARRY BALL: This is a complaint which is very chronic, and which in my experience does not yield easily to any form of treatment. It lasts for several months, or for a year or two, and then gets well of itself. We are apt to pin our faith to some remedy which has apparently cured a case, but very likely the case was undergoing spontaneous cure, and the next time we try the remedy we are disillusioned. With regard to the electric cautery, which has been mentioned as efficacious, I tried it several years ago, but found it no better than other forms of treatment. Perhaps I was not energetic enough. No doubt if you destroy the whole tonsil with the cautery you may bring about a cure, but it is really doubtful whether very energetic treatment is called for in a complaint of this sort, which produces little or no symptoms, and which is often discovered accidentally. Some years ago someone described a treatment by a solution of salicylic acid dissolved in spirit as being certain to bring about a cure in a very short space of time. There happened to be a nurse in the West London Hospital at the time who had this complaint in a well-marked form. I tried the application for about three months without much effect. The idea of using salicylic acid locally was no doubt suggested by the structure of these outgrowths, which consists of layers of squamous epithelium in a horny condition. It is probable that the leptothrix is merely accidental, and not the cause of the disease.

Dr. NEVILLE WOOD: I should like to take the opportunity of asking whether this disease has of late become more common. This query is prompted by the fact that an unusual number of these cases have recently come under my personal observation.

With regard to treatment none of the usual parasiticide applications have been of any service, while Turkish baths, suggested by a previous speaker, have proved quite useless. All the cases have shown a tendency to gradual spontaneous cure. In one case the use of the galvano-cautery was speedily successful.

A Case of Misplaced Testicle.

Mr. COLE MARSHALL for Mr. P. PATON: The man came to the hospital for reasons unconnected with his testis, which he

only referred to as it were by accident. He states that he has had the swelling on the left side of his perinæum all his life, and that as a rule it gives him no trouble, though if he should accidentally sit on it he suffers similar pain to that caused by pressure on the other testis. The swelling is elastic and fluctuates, and no doubt consists of the left testis surrounded by a hydrocele with a hernia, probably sciatic.

The man says that the size of the swelling varies from time to time, no doubt owing to the varying amount of fluid in the tunica vaginalis.

A Case of Ankylosis of the Jaw.

Mr. ARMOUR: This girl, aged 24, is one of six children, all living and well. Her lower jaw has been ankylosed since infancy. No definite cause can be ascertained. She has never had scarlet fever. She has never had otorrhœa. There is a scar on the chin due to falling downstairs some years ago, whether before or after the jaw became affected is not known. This may, however, explain the condition, as in a case reported by Bottini, in which ankylosis followed a fall upon the chin and persisted for ten years. In the present case the jaws cannot be separated at all. The teeth are irregularly erupted and the two central incisors have been broken off to enable her to get food into the mouth. She masticates entirely with her tongue. There is no paralysis of the masseter or temporal muscles, though they are somewhat wasted. There is a marked lack of development of the horizontal ramus of the lower jaw. I propose to resect the condyle on both sides.

A Case of Parotid Swelling.

Mr. ARMOUR: Ten weeks ago this man began to suffer from pain which commenced at the base of the zygoma and extended to the angle of the jaw. It came on periodically about the same hour every day. Two weeks ago he began to have difficulty in opening the mouth. When I saw him a week ago there was a slight swelling limited by the parotid fascia, with a point of tenderness over the base of the zygoma. The pain was as before described. The jaws could only be separated half an inch. Two days ago I found the swelling increased in size but still limited by the parotid fascia. There was tenderness over the base of the zygoma and also along the course of the external jugular vein. The paroxysms of pain were in the same situation, but increased very much in intensity, coming on at the same time every day. Since then the swelling has become larger and more tender, and is taking on an acute aspect. The only point in his previous history to note is that he had gonorrhœa four months ago, from which he has quite recovered.

Since showing this case I have operated and found a small amount of thin pus beneath the upper part of the parotid fascia. The base of the zygoma and the upper part of the neck of the lower jaw were bare, though not carious. The capsule of the joint was open. Dr. Candler took cultures from the pus.

Mr. PARDOE: With regard to the swelling in the parotid region I do not think that it is connected with the temporo-maxillary articulation. It is, of course, a well-known fact that this joint is liable, perhaps specially liable, to attacks of gonorrhœal synovitis, but it is exceedingly rare to find it alone affected, although it may be the first of a series of joints to suffer. The swelling has very much and very rapidly altered in character in the last few days, Mr Armour tells us. In my opinion there is pus present, as evidenced by the deep pain and tenderness, heat, pitting on pressure, and sense of deep fluctuation. There is no stone to be felt in the Stenson's duct (a possible explanation), and owing to the trismus we are unable to examine the teeth. It appears to me a case of suppurative parotitis.

Mr. BALDWIN: I made a careful examination of this gland, but found no evidence of calculus. I agree with Mr. Armour that the condition is inflammatory and that the gland probably contains pus and requires incision, and would suggest that the pus be examined to try and ascertain the kind of organism present. The infection has probably spread up the duct from the mouth.

Hypertrophic Pulmonary Osteo-Arthropathy.

Mr. ARMOUR: This man came to my out-patients department suffering from syphilitic synovitis of the knee-joint. On examination, the clubbing of the ends of all the fingers and toes, with curving of the nails over them was noticed. He has no kyphosis nor swelling of the wrists or ankles. The left shoulder-joint is painful, and grating is felt on movement. Injuries to the terminal phalanges cause practically no pain. The patient says that he has had the condition as long as he can remember. He has had a winter cough for years. On examination of the chest, Dr. Elliott reports that there are well-marked signs of chronic bronchitis and emphysema.

A Case of Paralysis—10th, 11th, and 12th Cranial Nerves.

Dr. A. M. ROSS-SINCLAIR: A patient (G. T. N.), aged 29, consulted me on 2nd September last, complaining of pain on swallowing solids, an irritable cough with a good deal of watery phlegm—hoarse voice and loss of weight. On examination, I found the right side of tongue soft, somewhat

atrophied, and completely paralysed. The soft palate on same side paralysed. The right vocal chord immobile—left chord moving freely. The sterno-mastoid and trapezius are totally paralysed on same side, the only trace of the trapezius being a small strand, about the width of a pencil, in the acromial bundle, which can be demonstrated electrically. The surviving part is probably supplied from the cervical roots. The right shoulder droops, and the scapula is displaced outwards. The absence of the trapezius causes the levator anguli scapulæ to be subcutaneous. The patient's sensory motor and reflex functions being otherwise normal, all the paralysed muscles have lost their re-action to faradism and galvanism, except the right side of tongue which still reacts to galvanism, but with a sluggish contraction and ECC = ACC. There is no affection of the cardiac or respiratory rhythm. The lesion is due to syphilis, contracted seven years ago. The lowest roots of the vagus supply the right palate and vocal cord, the trapezius and sterno-mastoid being supplied by the spinal accessory or 11th cranial, and the tongue by the hypoglossal. There is probably a gummatous thickening of the membrane at the base of the medulla, implicating the 10th, 11th and 12th cranial nerves on the surface. The patient is steadily improving under specific treatment. Most of the points are shown in the photographs. I am indebted to Dr. Ball for confirming the throat condition, and to Dr. Purvis-Stewart, who saw the patient, and sent me notes as to the condition of the muscles.

ORDINARY MEETING.—December 2, 1904.

C. M. Tuke, Esq., President, in the Chair.

The minutes of the last meeting were read and confirmed. The following gentlemen were balloted for and unanimously elected: S. Jervois Aarons, M.D.Edin., M.R.C.P.Lond., 14, Stratford Place, W.; John P. Candler, M.A., M.B., B.C.Cantab., West London Hospital; John H. Dauber, M.A., M.B., B.Ch.Oxon., M.R.C.P.Lond., 29, Charles Street, W.; J. A. C. Forsyth, M.Sc., M.B., Ch.B.Vict., 2, Beaumont Street, W.; A. Kinsey Morgan, F.R.C.S.Edin., Littlebarn, Poole Road, Bournemouth; Harry Overy, M.B., Ch.B.Edin., F.R.C.S.Eng., Metropolitan Hospital, Kingsland Road, N.E.; Martin J. Richardson, M.B., C.M.Edin., 47, Gloucester Place, Portman Square, W.; J. Greaves Wiseman, F.R.C.S., Stanraer, St. Peter's Road, St. Margaret's-on-Thames. Eight new members were nominated, to be elected at the next meeting.

Case of Paralysis of 10th, 11th and 12th Cranial Nerves.
Showing Paralysis of Right Side of Tongue, Sternomastoid and Trapezius Muscles.

Dr. A. E. RUSSELL then read a paper on the diagnosis of acute abdominal disease (see p. 1).

The PRESIDENT thanked Dr. Russell for his paper, and invited members to express their views on the subject.

Mr. D. J. ARMOUR: I do not find myself in agreement with Dr. Russell in regard to the question of the facies. I can recall three acute abdominal cases, one a sloughing gangrenous appendix with general septic peritonitis, and two perforating gastric ulcers, none of which shewed by their appearance the slightest sign of their condition. I am accustomed to lay great stress upon segmental spasm and resistance of any of the abdominal muscles as pointing to deep mischief. That this spasm and resistance should be segmental is clear when one remembers that all the abdominal muscles are supplied by a number of different nerves. I think the most difficult thoracic condition to diagnose is the very acute one, especially in children, before any physical signs can be detected. I have had a personal experience of such cases at the Belgrave Hospital for children.

Mr. E. P. PATON: The subject brought before us by Dr. Russell is such a large one that it is hardly to be expected that every point can be touched upon, but there is one feature that is not infrequently present in the course of a good many cases of acute abdominal disease, to which I think no reference has been made either in the paper or by the subsequent speakers—I refer to the *quiet period* which not infrequently follows immediately on the acute onset, during which time the symptoms which at first have appeared of the most threatening character almost entirely subside, and the patient seems for the time being almost comfortable. This is particularly to be noticed in some cases of very acute appendicitis and of perforation of the alimentary tract. Should the patient be seen during this stage of the disease it is only too easy to be misled into the belief that nothing really serious is wrong. A few hours, however, soon reveals the error by the recurrence of symptoms of the acute mischief in an aggravated form, usually accompanied by much collapse. The only way to be fortified against making this error is to know that this train of events not infrequently occurs; and in any case of doubt the patient's condition must be watched from hour to hour, so that the favourable time for operating may not be missed.

Dr. MANSELL MOULLIN: I am surprised to hear from Dr. Russell that gynæcological cases constitute such a small proportion of general abdominal surgery.

In women of the child-bearing age the reproductive organs are certainly the most frequent source of abdominal trouble.

The one condition which the gynæcologist regards as essentially an acute case is that of hæmorrhage due to tubal rupture. The symptoms are mainly those described by Dr. Russell. The patient is suddenly seized with the most intense pain in the lower abdomen. She may be engaged in some trifling occupation at the time, or even be in bed. She very soon passes into a condition of collapse, and is evidently alarmingly ill. Now what has happened? The practitioner, hastily summoned to such a case, has to form some conclusion as to the particular organ in trouble. Unless he bears in mind the possibility of hæmorrhage, he will certainly miss the case altogether. To a great extent he must be guided by his own observation. The patient is much too ill to give any account of her previous history, and details as to menstruation mentioned by Dr. Russell are valueless. She may be losing at the time. If so, it is a clue to follow up. A vaginal examination is imperatively called for. Pressure on the cervix uteri at once elicits the most intense agony, and confirms the suspicion that the uterus is the organ in fault.

I regard this extreme sensitiveness of the uterus as a symptom of the utmost importance. In many of the most severe cases of hæmorrhage, rupture occurs within the first week or ten days—long before any condition has developed which can be appreciated by the examining finger; but the pain excited by examination indicates the nature of the trouble.

Now with regard to the question of treatment. The only reliable means for arresting hæmorrhage is to cut down upon the vessel and secure it. Some discretion, however, is called for. If the patient is in an extreme condition of collapse it is evident an operation will only hasten the end. Transfusion may be of assistance, but does not always save the patient. In practice, treatment is necessarily controlled to a considerable extent by the circumstances of the case. The journey to the hospital in an ambulance or other vehicle is not calculated to improve her condition, although it may be considered the best course to adopt. An operation at the patient's home necessarily involves a delay of some hours—a delay which may really be the very best treatment. Nature is doing her best to arrest the hæmorrhage by reducing the blood pressure to a minimum, and if the case stops short of a fatal issue a reaction takes place, and the patient may be in a far better state to stand an operation in two or three days' time. A fatal issue has been known to occur in three hours, but fortunately these terrible cases are the exception.

Mr. McAdam Eccles: There are four points I would refer to. I was struck with the high percentage of intussusception

in the cases recorded at St. Thomas's, 16 per cent., as compared with 37 per cent. of appendicitis. I venture to think that this may have been accidental for the years mentioned. Dr. Russell has not alluded to the question of hyperæsthesia in the diagnosis of acute abdominal disease. It may be of service, but time does not permit to discuss it. Then, with regard to the exhibition of morphia, I should prefer to place cases under two headings. One, where the patient will have to be removed, say to hospital, *one* dose of morphia subcutaneously is, I believe, clearly indicated; but it should never be repeated, and it would be well if the practitioner would mention the time and strength of the dose in his note to the house surgeon. The other, where, if operation is performed, it will be undertaken in the patient's dwelling, then *no* morphia should be given until the case has been seen by the surgeon.

Lastly, there may, in some of these cases, be two causes of acute abdominal symptoms in one and the same patient.

Dr. SEYMOUR TAYLOR: I would ask Dr. Russell whether the presence of indican in the urine has been looked for. In a large number of examinations I have found indican almost invariably present in disease and injuries affecting the intestines or their peritoneal covering. I cannot claim for this symptom any value from a differential diagnosis point of view, but I am convinced it is of considerable use in deciding such cases—for example, where there is a difficulty in locating the injury as between (say) muscle and bowel.

As to latent symptoms in cases of peritonitis, I submit that in most instances the first and predominant condition is *shock*, and what might be regarded as a quiet pulse is really an indication of this shock. The pulse falls, and the temperature falls directly after any severe abdominal lesion: and these phenomena are succeeded by a reaction in which the pulse takes the lead, but soon to be followed by the temperature.

Lastly, I would urge that, notwithstanding recent researches and literature, pain is by no means necessarily a guide to the seat of lesion; and that, when there are symptoms which point to a disease or condition which is beyond the reach of medicine, the sooner we call in surgical aid the better chances we give our patient.

Mr. ASLETT BALDWIN: The cutaneous hyperæsthesia mentioned by Mr. Eccles is of great interest, but it is necessary to bear in mind that occasionally its presence or absence may be misleading. For instance, it has been observed that in cases of appendicitis there is sometimes hyperæsthesia of the skin along the distribution of the tenth dorsal nerve. If the appendix becomes perforated or gangrenous this hyperæsthesia diffuses. So that if this condition has been present and then

passes off without a corresponding amelioration of the other symptoms of the disease, instead of pointing to improvement, it is a sign of very grave import, and that immediate operation is necessary. Dr. Seymour Taylor has mentioned that severe shock is always present with grave abdominal injuries, but I should like to point out that this is not necessarily so. Some time ago I saw a man who was admitted into this hospital with a bayonet wound of his abdomen; his pulse was scarcely accelerated at all, his temperature practically normal. He had no signs of shock, and only complained of slight pain in his belly. I saw him very soon after the injury, and opened him at once, and found that the bayonet had passed through three layers of the mesentery, in which there were several spurting vessels, had transfixed a loop of small intestine, and had perforated the large intestine. Another case was that of a boy who had a pistol-bullet wound below and to the left of the umbilicus. The accident happened in the country, the boy was carried some distance to the railway station on his father's back, and brought 30 miles by train to London. On admission to hospital he showed no signs of shock or collapse, and had a normal pulse and temperature. Several hours afterwards his pulse rate slightly increased; his abdomen was opened, and it was found that the bullet had passed through two coils of small intestine.

Mr. L. A. BIDWELL: We must all congratulate Dr. Russell on the most interesting paper which he has read, and I cannot but feel that Dr. Russell is a most surgical-minded physician. Two distinct questions are raised in Dr. Russell's paper—the one is the diagnosis of the particular lesion present, and the other is as to the necessity of immediate operation. This is by far the most important thing to decide, and here delay takes away the only hope. In acute abdominal cases I consider that the existence of a rapid pulse with a low temperature is the gravest symptom, and one nearly always demanding immediate operation. If this one symptom were thoroughly grasped, the number of "too late" operations would be diminished. There is one diagnostic symptom of localised peritonitis which Dr. Russell does not mention. I refer to a creaking sensation beneath the fingers. This is present in acute and chronic cases.

I would like to say one word about acute suppurative conditions of the gall bladder. By a curious coincidence I operated on four such cases within a year. They are extremely difficult to diagnose from acute appendicitis, since the pain in the early stages is referred to the umbilical region; the inflammatory tumour also often extends right down into the iliac fossa, and the only point which will aid us in making a

diagnosis is that the tumour has a rounded edge below, and above it becomes merged in the liver dulness. In an appendix inflammatory swelling the rounded edge is above, and there is a resonant area between it and the liver dulness; the lower margin is also usually hard to define.

The Mirror of Practice.

ANOMALOUS CASE OF FRONTAL SINUSITIS.

By Richard Lake, F.R.C.S.

The patient in the case about to be narrated was a young lady of about three-and-twenty, who, sixteen months previously to her coming under observation, had an abscess together with severe external swelling at the inner canthus, and below the right eye. The first molar on the same side was removed, and an abscess was found at its root. The abscess had "ruptured into the nose," and a very offensive smell was noticed. Occasionally she had frontal headache, and sometimes noticed an offensive smell in the nose, together with some discharge. There was always retropharyngeal discharge in the morning, and at times a swelling in the roof of the mouth, which appears to have been a blood cyst in connection with a decayed tooth.

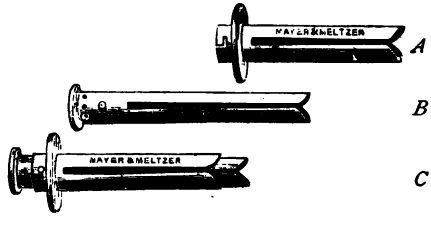
Beyond these somewhat meagre details, I found afterwards, on talking to the husband of my patient, that his wife had suffered, amongst other things, with periodic loss of memory, and during the time that the attack lasted she was completely unable to remember anything. This was associated with dimness of vision on the right side, and giddiness. So far as I know, these symptoms, to say the least, are very rare in frontal sinusitis, and the case is reported on account of its rarity.

On examination there appeared to be no doubt that the right maxillary antrum contained pus. It seemed quite open to doubt whether there was any further sinus affected, the diagnosis being rendered much more difficult by the almost total occlusion of the right nostril through a badly deflected septum. The maxillary sinus on that side was treated by the radical method, and a large drainage tube brought out through the nose, the deflection of the septum being corrected at the same time.

The patient was very much relieved, and this sinus was

completely cured, but within a short time she had another attack of headache, vertigo, and offensive subjective odour. But now it was easy to examine the whole of the middle turbinal and middle meatus on the right side, and *at no time was any pus ever seen in the nose.* Soon she had an acute attack. I immediately went to see her, hoping to find some distinctive evidence that the frontal sinus was involved, but I found both sides equally tender, so that the only real evidence we had was the offensive subjective odour, together with a slight tenderness over both frontal sinuses. After a consultation with Mr. Butlin, however, I decided to operate on the right frontal sinus.

When this sinus was opened, it was found to be full of a thin ichorous fluid, and the sinus itself extended over the whole area usually occupied by the two sinuses, the left in this instance being undeveloped. It is now four years since the operation, and the patient is perfectly sound, with almost no visible scar.



A, Outer tube; *B*, inner tube; *C*, tube ready for insertion.

It is often well, with regard to the maxillary sinus, to attempt preliminary drainage through the alveolar process, the site of election being that part of the alveolus occupied by the first molar tooth, but it is hard to conjecture the circumstances under which it would be permissible to extract a sound tooth for this purpose. In the figures will be seen the tube I am in the habit of using. It is one I first had made some ten years ago, not being satisfied with any of those in use. The inner tube (*B*) is held in position by a bayonet joint. The solid top enables patients to bite on it without stopping up the lumen, and the four small holes at the base of the inner tube prevent the accumulation of pus within the tube, and, consequently, within the antrum; and the slits down the side of the tube enable the antrum to be drained, however far the tube passes into it; whilst, by the rotation of the inner tube, necessary to abstract it, any button of granulation tissue pushing through into the lumen is cut off.

In performing the radical operation on the maxillary antrum, that is to say, opening through the outer maxillary wall, I employ invariably the following modification of the so-called Caldwell-Luc operation:—

After retracting the cheek, so that the lower part of the external surface of the antrum is well exposed, a hole, one-third of an inch in diameter, is made by means of a small gouge directly into the antrum. A pair of ordinary straight bone forceps is now taken, and one blade inserted into the hole, the straight side being towards the nose, and the external wall is cut through parallel with the mid line of the nose. The bone forceps are now introduced again, with the straight side towards the teeth, and the external wall is cut through as low down as possible, parallel with the teeth. Then, by means of the closed forceps the external wall of the antrum, still adherent to the tissues of the cheek, is lifted up, and the antrum rapidly plugged with a large sponge or a long piece of dry gauze. When the hæmorrhage is under control, it is well to examine the interior of the antrum with a large nasal speculum and a reflected light. For the after steps of the operation, I follow the accepted custom.

One small detail with regard to the frontal sinus operation in this case might be worth mentioning here. My patient was very anxious indeed to have no scar, so a small curved silver tube was made, which, after the frontal sinus had been opened and thoroughly cleansed, was passed down the infundibulum, and maintained in its place by a wire stitch coming out through the eyebrow. It was easy to see the end of the silver tube in the nose, and pass a small rubber tube up it for the purposes of irrigation, but it was necessary to remove it under an anæsthetic, as the patient was afraid it would hurt her when being drawn down to the nose, which it is extremely probable it would have done, but the result was most satisfactory in every way, and she has no scar which is visible without careful scrutiny.

A CASE OF SEPTIC RASH SIMULATING SCARLET FEVER.

By Leonard C. Dobson, M.D.Lond.

In the month of October I was consulted by a lady, who stated that she was about five and a half months pregnant, and that after going down the water-chute at Earl's Court, she passed, per vaginam, a quantity of watery fluid, which had been coming away in gushes since. She was sent home

immediately, and told that she would probably miscarry very shortly. Nothing, however, occurred for seven days, with the exception that the fluid continued to pass, and the patient said that the movements of the fœtus had ceased. On the seventh day, however, I was sent for, as the patient had had a sharp rigor, and the temperature had gone up to 103°. As the child was undoubtedly dead, and the patient was obviously suffering from some form of septic absorption, she was placed under chloroform and the os dilated. Labour followed in due course, and she was delivered of a fœtus and placenta undergoing decomposition. The uterus was carefully washed out, and all went well for two days, at the end of which time, however, she was seized with another rigor, and the temperature went up to 104°. The next day she was very ill, with all the signs of septic fever, and I accordingly gave her chloroform, and passing the finger into the uterus removed two or three small pieces of decomposing and stinking placenta, which were attached to the uterine wall, and carefully washed out the uterus with lysol. Her temperature shortly afterwards rose to 106°, and then fell to 99°. It continued normal for two days and then rose again to 103°, accompanied by an outbreak of a scarlatiniform rash on the chest, back, arms, and thighs, with a good deal of flushing. The patient did not feel very ill, and complained more of the discomfort of the itching than of anything else. The rash continued for some five or six days, during which time the temperature remained elevated. The discharge during this time was quite sweet and natural, and the pulse never rose above 80. On the sixth day the rash rapidly disappeared, the temperature fell at the same time to normal, and the patient made an uninterrupted recovery.

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The case is mentioned, as it presents some interest in the resemblance of the rash to scarlet fever. Indeed, some text books have described a form of scarlet fever which they call "surgical scarlatina," which occurs in patients with open wounds, and which is most probably a septic condition. Though undoubtedly there have been cases in which a genuine attack of scarlet fever has followed on an operation, careful investigation seems to show that such cases are rare, and that most of them are really septic in origin. Rashes of this sort generally appear at the time that other septic conditions make their appearance, that is to say, one to four days following the operation. The appearance of the rash is generally accompanied by a marked rise of temperature, which continues until the rash disappears, and is accompanied by headache, malaise, &c., but often in mild cases there are few constitutional symptoms. It is generally followed by slight desquamation, as in this case, but may be distinguished from

true scarlet fever by the absence of the strawberry tongue and sore throat, the course the temperature takes, and the concurrence of other signs of septic absorption.

A CASE OF ANTRAL CYST.

By SPENCER PALMER, L.R.C.P., M.R.C.S.

Notes while in West London Hospital, by J. Barry Ball, M.D., F.R.C.P.

S. P., aged 9 years, was admitted to the Reigate and Redhill Cottage Hospital, on September 21, 1904, complaining of a swelling on the right cheek. The history was that, on July 30, he was struck on the face by a small stone thrown by a boy. Not much notice was taken of it at the time, but in about a fortnight the cheek began to swell, and it was thought that this might be due to a dental abscess; there was an absence of any pain. On admission, there was a distinct swelling of a hard, bony consistency, involving the whole of the anterior wall of the right superior maxillary bone. The orbital plate and nasal bones were not encroached upon, the skin moved freely, and the swelling was nowhere adherent to it. On raising the upper lip there was a fulness of the gum at the junction of the cheek with the upper right canine tooth. An incision three-quarters of an inch in length was made, and about two or three drachms of thick gelatinous fluid, with a suspicion of pus escaped. On passing a probe it went straight into the antrum. No bone was to be felt, and no swelling in the antral cavity, nor was there any bleeding or fœtor. A direct opening led through the lower anterior surface of the superior maxillary bone. A gauze plug was inserted, and the cavity drained for several weeks. By the middle of October it was noticed that the deformity of the face was increasing, and the bony swelling and hardness extended towards the roots of the molar teeth, and, in addition the nasal bones were encroached upon. The orbit appeared to be slightly pushed up. The nasal wall of the antrum was bulging, and there was a distinct distension of the hard palate on the right side. The sinus in the gum continued to drain, and a probe could be passed into the antrum. As the case was open to doubt from a diagnostic point of view, the patient was transferred to Dr. Barry Ball, at the West London Hospital, and he was admitted there in November. On admission, the right cheek was markedly bulging, the swelling being due to the anterior wall

of the maxillary antrum. There was a small opening low down, just above the canine tooth.

By electric transillumination it was found that both sides of the face were equally translucent. It was clear that a cyst had formed in the antrum, which had been drained, and if the opening was allowed to close the cyst would fill again, and the distension would progress. The best thing seemed to be to make a large opening into the nasal fossa, which should be permanent, and thereby more efficiently drain the cyst cavity. On the following day, under an anæsthetic, an opening was made from the mouth through the anterior wall of the antrum. The cavity was found to be quite empty. A good-sized opening was then made from the cavity into the nose. The question then arose whether the thinned anterior wall should not be removed in great part, in order to remove the deformity. It was decided, however, to leave it, as, considering the age of the patient, it seemed probable that the deformity would right itself in the course of time. In about a week the incision in the soft parts over the anterior wall of the antrum had healed, and the boy left the hospital. On December 1 the deformity of the cheek had to a great extent decreased, the bulging of the palate and nasal wall of the antrum had almost disappeared; the nasal drain was still discharging. The early stages of the case presented several features of interest from a diagnostic point of view. My first impressions of the case were that it presented features associated with the five following conditions :—(1) Simple cyst; (2) empyema of antrum; (3) fracture with callus; (4) caseous tumour; (5) myeloid sarcoma of antrum. Sarcoma was most feared on account of the general enlargement and rapid growth in spite of drainage, but this diagnosis was negatived by the fact that, although the deformity was increasing in size, there was no pain, and no implication of the skin or glands. The probe could be passed into the antrum, and be moved about quite freely; there was no hæmorrhage, and electric transillumination showed both sides of the face to be equally translucent. Osseous tumours are generally single or multiple, and are exceedingly slow growing; in this case the growth was rapid. They may occupy the whole of the antrum and then bulge the cheek or palate, whereas in this case the antrum was empty. Also in osseous tumours there is opacity to transillumination. Fracture may be readily dismissed, as callus, while it might account for a certain amount of deformity on the cheek where the blow was struck, could not be responsible for the bulging into the nose and mouth, and, besides, spongy bone such as constitutes the anterior plate of the superior maxillary bone does not throw out callus. Empyema is usually found in connection

with a carious tooth, but sometimes occurs after influenza, or from a chronic retention, owing to the nasal orifice being blocked by polypi. The absence of purulent or offensive discharge negatived this theory. Simple cysts are, generally, of dental origin, and may arise (1) in connection with the fang of a carious tooth; (2) by an error in development of the enamel sac covering the crown of the tooth (dentigerous cysts); and (3) by obstruction of a mucous follicle in, or myxomatous degeneration of, the lining membrane of the antrum. These cysts usually contain a serous-gelatinous or brownish fluid, in which cholesterine is usually found. In the absence of any of these causes being discovered, is it impossible that the cyst in this case was caused by the injury inflicted by the stone, as the whole history bears a close relationship to it? If so, the case is interesting, owing to the trivial amount of injury caused by the stone, the absence of all pain, and the absence of fluctuation or egg-shell-like crackling on palpation, and the fact that although a drain was made through the gum, this was not sufficient, and the deformity increased in size. The only treatment appears to be very free drainage, either by one large opening, or, better still, by a counter opening in the nasal cavity, as was carried out by Dr. Ball in this case.

TREATMENT OF SKIN DISEASES WITH THE X-RAYS.—Müller reports on the employment of this agent in pruritus, hyperidrosis, and chronic eczema. By the use of moderately soft, or even very soft, tubes he obtained excellent results, but does not consider it wise to apply the method indiscriminately in these diseases without having tried other procedures. A case of pruritus vulvæ of long standing which had resisted other treatment was entirely cured after five exposures. In the case of profuse sweating of the hands, the exposures were followed by an exfoliation of the skin, and from the new dermal covering this excessive perspiration was absent. Another patient with this condition in the anal region was also favourably affected. The cases of chronic eczema were freed from the itching and the indurated skin after a few exposures. —*Münchener medizin. Woch.*, June 7, 1904.

Hospital Notes.

By Charles Buttar, M.D.

The following case is reported by Dr. Seymour Taylor :—

F. K., a male, aged 3½ years, was admitted to the West London Hospital under my care on November 7, 1904, suffering from hæmaturia due to infantile scurvy.

As a case of scurvy in an adult was described in a recent number of this Journal, an account of a similar affection occurring in a young child may present some features of interest.

The previous medical history of this child is noteworthy. Eighteen months before admission the boy was certified to be suffering from small-pox and removed to a hospital. No scars could be found when he was under my care, except those of vaccinia; and it is doubtful if the diagnosis of small-pox was a correct one. Moreover, the child's father considers that "*this former illness was of the same character as the present attack.*"

Four months ago the child was in another London Hospital "suffering from Purpura," and whilst there, he had a severe attack of epistaxis, lasting six hours.

The parents are healthy; but it is in evidence that the child has been largely if not entirely fed on "nursery buscuits," or on some one or other of the numerous patent foods for children. The basis of nearly all these foods is starch slightly altered by baking or other physical or chemical process. They are extremely poor in fats.

On examination, the child was seen to be a fairly well-nourished but anæmic child, with an intelligence beyond his years. The body was marked by petechial spots. They were numerous on the trunk and limbs: but especially so on the extensor surfaces of the skin over the knees and elbows.

In certain localities, specially over the lower end of the tibiæ and also on the forearms and buttocks, hæmorrhages of larger size (vibices) were fairly plentiful, whilst on the face (forehead and cheeks and chin) still larger extravasations were observed. One on the left frontal eminence was the size of a shilling piece; and was said to have been caused by a fall. There was some hæmorrhage from the left auricular meatus, but without any evidence of disease of the middle ear.

Several small hæmorrhages were found under the mucosa of the tongue and the inside of the lower lip; but the gums could not be called spongy, though they were somewhat swollen, and there was some fœtor.

The lungs were healthy. The heart dulness was normal, but

a systolic murmer was heard over the area of the pulmonic artery.

The liver and spleen presented no signs of enlargement, and there was no evidence of any hæmorrhage into the peritoneal cavity.

The urine had a specific gravity of 1012, it was acid in reaction, and of course contained much albumen from the large quantity of blood with which it was mixed. This entirely disappeared after the child had been seven days in hospital.

The temperature throughout the illness showed a slight evening rise above, and a morning fall below, the normal line. That is to say it occasionally rose to 100° and fell to 97·2°.

There was no pain or swelling or tenderness at the epiphyses of the long bones. There was no beading of the ribs beyond that which is always present in children. The cranial fontanelles were closed and, in short, the child presented no signs of rickets. In view of the large amount of the blood which the child had lost by the urinary tract, my House Physician prescribed without apparent benefit calcium chloride and extract of suprarenal gland, but these remedies were discontinued on my first seeing the patient; and instead, a diet consisting of raw beef juice, with green vegetables, potatoes and carrots, was ordered. Oranges and bananas were also given daily. The child rapidly improved, the hæmorrhages cleared up, and an uninterrupted recovery was reached on November 29, the patient being discharged "Cured" on December 3.

In 1883 Dr. Barlow (now Sir William) drew attention to the comparative frequency of such cases as the above, and gave a complete description of the symptoms as they occurred in some 30 cases. Although the majority of them were children under two years of age, some were older. But his cases differ in no marked clinical features from cases of sporadic scurvy occurring in adults.

It is true that a child suffering from rickets is probably predisposed, by the very faulty dietary which has helped to produce that disease, to acquire scurvy. But I can never convince myself that there ever is a distinct clinical condition which we can label "scurvy rickets."

Here we have a child who has admittedly been fed on a dietary almost destitute of fresh meat-juices and of vegetables: and who begins at once to improve, and improve rapidly, as soon as an antiscorbutic diet is prescribed. Certainly it had no marked gingival symptoms; but there were hæmorrhages in the tongue and inside the lips; it had hæmaturia; there were hæmorrhages under the skin of the buttocks; and

although the child was apparently well-nourished, it was decidedly anæmic. But there were no affections of the joints, no enlargements of any epiphyses; and, most conclusive evidence of all, the child rapidly recovered on its antiscorbutic diet.

I have seen another case recently in consultation with Dr. Hancock of Leytonstone, in which the symptoms, though obscure as to the exact diagnostic indication, suggested some lesion in the meninges of the spinal cord. It was only by the subsequent appearance of spongy gums, and of hæmorrhages from the mucous membrane of the tongue and elsewhere, that we were put on the track of the right diagnosis. Under antiscorbutic diet, all the symptoms quickly improved and the child was restored to health.

The teaching value of such cases is the alertness which we must exhibit when confronted with cases of hæmorrhage in children. An enquiry into the dietary of these cases will often save us some trouble and increase our reputations.

RADIOTHERAPY OF UTERINE TUMOURS. — Deutsch reports the successful treatment of four cases of uterine myomata by the Röntgen rays; in all instances the tumour was materially reduced in size; in two, vesical troubles that had existed for a long time were relieved by a very few sittings; in both these cases, however, after a long series of applications, symptoms occurred resembling those supervening in the treatment of goitre with thyroid gland; the extreme emaciation, the nervous disorders (palpitation, irritability, lassitude, &c.) disappeared directly the treatment was interrupted. Severe hæmorrhages in one case were materially diminished by a series of radiations without any medical treatment. In two instances a sero-sanguineous vaginal discharge occurred directly after the radiation of the hypogastrium. In one instance in which a uterine myoma coexisted with a larger ovarian cystoma, a rapid diminution occurred in the former after thirty applications: the ovarian tumour was comparatively little smaller. From the effect of the Röntgen rays in checking the hæmorrhage and putrid discharge in an inoperable carcinoma, they appear to palliate the effects of malignant disease, and they would certainly seem to be suitable treatment for cases of uterine myoma in which operation, not always free from danger, is contra-indicated.—*Muenchener m. Wchns.*, No. 37, 1904.

Reviews and Notices of Books.

MUMMERY ON THE AFTER-TREATMENT OF OPERATIONS.[1]

A BOOK on a subject which has been very sparingly dealt with in the text-books of surgery supplies a distinct want, and if written, as this is, by one who thoroughly understands his subject, should form a handy book of reference and a guide to those who, left with patients after operation on their hands, wish to know what complications to expect and how to avoid them. The author brings to bear a large amount of common-sense in his treatment of cases, and valuable hints will be found in the introductory chapters on the method of dealing with sickness, on the position of the patient, and the treatment of the wounds. We are glad to see that he recommends that the patient should be at once put into the easiest position, which will be generally on his side with the knees flexed—after abdominal operations—thus favouring rest and comfort. Nurses, in the absence of any directions to the contrary, almost invariably keep their patients for the first twenty-four hours in the dorsal position, a position which few people are accustomed to rest in, and the result is discomfort, restlessness, and pain. A valuable hint is given on the sudden deprivation of smoking or of some drug which the patient is accustomed to take, as being a common factor in causing insomnia and indigestion, besides often making the patient miserable and discontented.

A very clear account of shock and its pathology is well worth perusal, together with the methods of avoiding it and dealing with it when it appears.

The author takes the operations on the various regions of the body in succession, giving a list of the complications which may ensue and the best method of dealing with them, together with directions for general treatment. An appendix containing instructions for rectal, nasal and subcutaneous feeding, dietary, and artificial appliances, completes this very useful volume.

DUNDAS EDWARDS' NOTES ON ASSOUAN.[2]

We are sometimes consulted by patients, who are considering a visit to Egypt, with regard to questions of climatology, clothing and exercise. For those of us who have not visited the countries this little volume will be of some assistance in answering these questions, at least so far as they appertain to the region of Assouan, which is at the foot of the first Cataract, 580 miles south of Cairo. All the chief points likely to be raised are dealt with, such as humidity, temperatures, and sunshine. It is interesting as proving the purity of the

[1] "The After-Treatment of Operations." By C. Lockhart Mummery, F.R.C.S.Eng. Second Edition. Pp. 240. Illustrations 37. London: Baillière, Tindall & Cox. 1904. Price 5/- net.

[2] "Notes on Assouan." By G. Dundas Edwards, M.A., M.R.C.S., L.R.C.P. London: John Bale, Sons & Danielsson. 1904. Pp. 36. Price 1/-.

atmosphere to read that after repeated experiments by exposing sterile gelatine plates, on no occasion was there any evidence of micro-organisms, and that there are so few cloudy days that the sun virtually shines from sunrise to sunset. Hints on food, clothing, exercise and the use of sun baths are useful addenda.

LEWIS JONES' MEDICAL ELECTRICITY.[1]

By an error, in our last number a notice was given of a previous issue of this work ; we now have received the fourth edition, published by Messrs. Lewis as one of their practical series. The work has been thoroughly revised and greatly enlarged It is somewhat remarkable that the number of English writers on these subjects should be so limited, but Dr. Lewis Jones has filled the gap with a book which is admirable both in its illustrations and its information, which is brought fully up to date. All the latest methods of applying electricity, such as sinusoidal and high-frequency currents, electric light, baths, and the use of X-rays are described, and the necessary apparatus carefully explained, together with their therapeutic application. Dr. Lewis Jones, as physician in charge of the electrical department of St. Bartholomew's Hospital for many years, has had great experience, and the result of this experience is embodied in this work, which without doubt is one of the best and most reliable on the subject of electricity which is issued in England.

SANTI ON MALIGNANT DISEASE OF THE LARYNX.[2]

A short description of Carcinoma and Sarcoma of the Larynx, in which all the present knowledge on the subject is lucidly and succinctly dealt with. The chief object of the work is to bring into prominence the views as to the best operative treatment of laryngeal cancer held by the leading authorities in England, to point out that the operation of Thyrotomy or Laryngo-fissure gives a better chance of thorough removal of the disease, and is to be preferred for this and other reasons to any other method of procedure. The palliative measures to be taken for those beyond the reach of our operation are summed up very shortly, and we think that this description should be revised and enlarged, and the usefulness of the book very materially increased thereby.

BENTLEY ON EGYPT AS A WINTER RESORT.[3]

This is a small guide for the use of anyone who may be desirous of acquiring some knowledge of the winter climate of Egypt and its characteristics. It consists of valuable hints, such as a list of cases

[1] "Medical Electricity." A Practical Handbook for Students and Practitioners. By H. Lewis Jones, M.A., M.D. Fourth Edition. Pp. 536. Illustrated. London: H. K. Lewis. 1904. Price 12/6.

[2] "Malignant Disease of the Larynx." By Philip R. W. De Santi, F.R.C.S., Pp. 107. London: Baillière, Tindall & Cox. 1904. Price 4/.

[3] "Medical Hints and Notes on Egypt as a Winter Resort, with a short account of Helouan and its Sulphur Baths." By Arthur J. M. Bentley, M.D. Pp. 42. London: John Bale, Sons & Danielsson, Ltd. 1904. Price 1/.

suitable or unsuitable for wintering in Egypt, the advantages of the climate, the precautions necessary to be taken, and directions as to the various routes. A supplement gives useful information in the shape of a list of mosques and churches, banks, clubs, &c., postal information, and the principal objects of interest in and near Cairo.

COWEN ON X-RAYS.[1]

Mr. Cowen has made a useful addition to the small number of English books on the subject of X-rays. It is written in order to assist practitioners who desire to use the therapeutic properties of X-rays in treating their patients, and to give some hints in the choice of apparatus and the technique of the exposures. The former is summed up in a very short space, and in a future edition we think might be elaborated, for although the author in his preface asserts that he has not included the elementary facts of electrical knowledge, yet we think that experience such as his would be most useful in explaining to the young operator ; for whom apparently he writes, the technique of some of the more complicated parts of the apparatus, and more especially the means by which a soft or hard tube may be selected. The value of the book will be found in the description of the technique of the exposures necessary to obtain favourable results in such cases as lupus vulgaris, skin diseases and malignant growths. This is carefully described, and the reader will find many valuable hints which will enable him to obtain good results in cases which before have not shown a favorable reaction. Many will be disinclined to accept the following statement without considerable reserve. " It would seem that if a carcinoma be submitted to the action of X-rays from the moment of its discovery, there is as good, if not a better chance of success, than if the operation had been decided upon in the first instance." We are, however, in accordance with his views on the advisability of submitting every case that has been operated on to the action of the Rays for a considerable period subsequently, in order to prevent recurrence.

MANSELL MOULLIN ON ENLARGEMENT OF THE PROSTATE.[2]

THE treatment of non-malignant enlargement of the prostate has excited so much attention recently that the publication of the second edition of Mr. Moullin's work upon the subject is very welcome, as it embodies the opinions and experience of a surgeon who has devoted much attention to this particular branch of surgery—opinions therefore

[1] " X-Rays, their Employment in Cancer and other Diseases." By Richard Cowen, L.R.C,S.I., L.R.C.P.I. Pp. 129. Illustrations 10. Price 2/6. London : Henry J. Glaisher. 1904.

[2] " Enlargement of the Prostate, its Treatment and Radical Cure." By C. Mansell Moullin, M.D.Oxon, F.R.C.S. Second Edition. Pp. xii. and 204. Octavo. H. K. Lewis, 136, Gower Street, W.C. 1904. Price 6/-.

well worthy of serious consideration. The sections dealing with the anatomy of the normal prostate conform generally to the usual descriptions in modern text-books, but we regret that the author has not dealt with the more recent anatomy of the enlarged prostate.

With regard to diagnosis the author devotes a very considerable section to various means of measurements of the enlargement and rather neglects the aspect from which we consider the subject should be approached, viz., the character of the growth. It should be sufficiently well understood by now that the gravity of these cases does not by any means necessarily depend upon the size of the enlargement but rather upon the direction followed by it. The question of the innocence or malignancy of the enlargement is not sufficiently dealt with, a matter of supreme importance since the operative treatment of the conditions has so much developed.

Discussing the question of operative *versus* non-operative treatment, Mr. Moullin holds strongly that except in the limited number of cases where the patients are capable and willing to observe the necessary precautions required by catheterism, the dangers of operation are less than those of continued catheter life, and we are in entire agreement with him.

Discussing the relief of retention, the author lays great stress upon the necessity for aseptic catheterism, and practically lays the whole danger in these cases at the door of septic infection. There is not a sufficiently clear distinction drawn between cases of acute and chronic retention, and the absolute necessity for very slow emptying of a chronically-distended bladder is not sufficiently insisted upon. He does not acknowledge the extreme danger of the sudden lowering of pressure in these cases, but attributes all danger to sepsis—in our opinion a very mischievous doctrine. It cannot be too widely understood that to suddenly empty a long over-distended bladder is to court swift disaster, even though the most minute precautions are taken to guard against sepsis.

In considering the choice of operation for radical cure, the author hardly accords sufficient space to the work of Freyer and other surgeons by the supra-pubic route, attributing the credit of the success of the operation to Belfield and McGill. There can be no question, we think, that the revival of suprapubic prostatotomy and the position it now enjoys are due to the work of Freyer and those who have followed upon his lines, for McGill's operation had been very nearly abandoned in the last decade of the past century.

The most modern work done by the perineal route is scarcely mentioned, and we look in vain for the names of Hartmann, Young, and Goodfellow, whilst Proust's work is accorded a bare mention, although the somewhat discredited operations of Nicol and Von Dittel are fully discussed. Bottini's galvano-caustic operation is regarded with some favour by Mr. Moullin, an opinion which we fancy is likely to be endorsed by but a very small number of those interested in urinary surgery at the present day, whilst median perineal prostatotomy is discussed as only a palliative measure. The questions of orchidectomy and varectomy are adequately considered.

The book has a good index, and the type and printing generally are excellent. It suffers, however, from the lack of illustrations.

We cannot, on the whole, consider this work as a completely up-to-date description of the subject to which it refers, nor as a completely reliable guide either to the surgeon or the general practitioner.

LAKE'S DISEASES OF THE EAR.[1]

THIS volume is intended for the use of students and practitioners, and the fact that a Second Edition has been required proves that it has been appreciated by those for whom it is written, and we can cordially recommend it to those practitioners who are taking an interest in diseases of the ear, for it is written in a clear and interesting manner, and the operations more especially are carefully described. The author devotes chapters to the anatomy of the ear, the special examination of the patient, special symptoms and their treatment, the diseases of the external ear, the suppurative and non-suppurative diseases of the middle ear with all their sequelæ, and the affections of the internal ear. One of the most useful is that devoted to a description of the various operations. We note that Mr. Lake is fairly sanguine of the results of treatment of chronic middle-ear disease. The illustrations on the whole are good, and there are three excellent coloured plates, showing different conditions of the tympanic membrane. An appendix consisting of 42 formulæ for use in the various diseases of the ear, should prove of considerable use to the reader.

GILES ON CLIMATE AND HEALTH IN HOT COUNTRIES AND THE OUTLINES OF TROPICAL CLIMATOLOGY.[2]

THIS book, which is divided into two parts, will appeal to two classes of readers. The first part, which is devoted to personal tropical hygiene, will prove of interest chiefly to the non-professional reader, and contains much valuable information put in popular language as to how to adapt oneself to living in hot countries. Anyone who has to live in the tropics would be well repaid by carefully reading it.

The second part is concerned with tropical climatology, and medical men will find here drawn up in tabulated form many data which could otherwise be obtained only at great trouble. The part can be obtained separately and should prove of the greatest help to medical men who are called upon to give advice to those who are leaving England for various parts of the tropics.

BATTLE ON THE DISEASES OF THE APPENDIX VERMIFORMIS.[3]

ALTHOUGH the literature of the appendix is already fairly large, this little book will be read with much interest by those who have to deal constantly with affections of that organ. There is an interest-

[1] "Handbook of Diseases of the Ear: for the Use of Students and Practitioners." By Richard Lake, F.R.C.S. Second Edition. Pp. 242, 5 illustrations, with 3 coloured plates. London: Baillière, Tindall & Cox. 1904. Price 6/-.

[2] "The Outlines of Tropical Climatology." By Lieut-Col. G. M. Giles, M.B., F.R.C.S., Indian Medical Service (Retd.) Published by John Bale, Sons & Danielsson, Ltd., London. Price 7/6, net. Part II. is published separately. Price 5/-.

[3] "The Surgery of the Diseases of the Appendix Vermiformis and their Complications. By W. H. Battle, F.R.C.S., and E. M. Corner, M.B., F.R.C.S. London: A. Constable & Co.

ing chapter on the anatomy of the parts, and the pathology is fully dealt with.

The method of removing the appendix during the quiescent period recommended by the author is fully described. An incision is made along the linea semilunaris, and the inner edge of the skin wound retracted where the rectus sheath is incised, an inch to the inner side of the linea semilunaris. The rectus muscle is then pushed inwards exposing the posterior layer of the rectus sheath, which is incised and the peritoneum opened. The appendix is brought out of the wound, and it is then crushed by a special clamp which divides the mucous and muscular coats, leaving only the peritoneal coat; this is then tied with a fine silk ligature and the free end of the appendix removed. The orifice into the cæcum is plugged by the inverted coats.

In operating for abscess, it is suggested that a search may be made for a sloughed appendix or concretions, this however is contrary to the practice of many surgeons, who believe that the less an appendix abscess is explored by the finger the better for the patient. In abscess pointing in the rectum, it is recommended to open and drain through the rectum; no results however are given of this method of treatment. The question of removing an appendix after an abscess has been drained and healed up is discussed fully, and it is urged that a secondary operation to remove the appendix should always be undertaken. In the treatment of general peritonitis due to appendicitis, great stress is laid on the influence of early operation on the mortality. The appendix is always to be removed first, and then the peritoneum is to be thoroughly cleansed. If the coils of intestine are distended, they must be incised and emptied before the peritoneum can be cleansed. In cleansing the abdomen, saline solution is advocated, and no antiseptics are employed either in the dressing or in the fluids used for washing out.

An interesting chapter is devoted to the diagnosis of acute conditions of the abdomen, and others are devoted to new growths, and to complications of appendicitis, among which are included subdiaphragmatic abscess, empyemic thrombosis, &c. A chapter on the relation of appendicitis to life insurance supplies much useful data on which to base an opinion in such cases.

LEEDHAM-GREEN ON THE STERILISATION OF THE HANDS.[1]

THIS book, which contains 96 pages, is devoted to the results of experiments on the methods of disinfecting the hands. The experiments have evidently been conducted with great care and the results obtained will not, we fear, induce surgeons to devote a longer time to efforts at sterilisation. The author proves that it is impossible to sterilise the hands by any method. With prolonged washing with soap and water, followed by immersion in an antiseptic solution, the hands were always full of micro-organisms, and curiously enough the longer the time spent in washing the hands, the greater the number

[1] "On the Sterilisation of the Hands." By C. Leedham-Green, F.R.C.S. London: Simpkin, Marshall, Hamilton, Kent and Co.

of colonies of bacteria which could be cultivated. This fact is explained by the hot soap and water softening the superficial layer of epidermis and so exposing fresh colonies of bacteria.

The most satisfactory results were obtained by a modification of Furbinger's method which is as follows :—

(1) The hands are just scrubbed for five minutes with soap and very hot water, the water being frequently changed.

(2) They are then rubbed with methylated spirit for three minutes,

(3) Then scrubbed for a minute or two with a 70 per cent. sublimate alcohol (1 in 1,000).

(4) Finally, rubbed until dry and polished with a sterile cloth.

After this method the hands will usually be found to be sterile so long as they remain dry, but so soon as they become wet, they will not remain sterile for any length of time. Among other methods experimented on, were washing with alkali soaps, with marble dust and with sand, but none of these produced any good results.

Under the circumstances the author recommends the use of gloves during an operation, in an aseptic case to protect the patient, and in a septic case to protect the operator. Of the two forms of gloves rubber ones are the only sort of any use, since silk or cotton gloves do not remain sterile as soon as they become moist.

Against these conclusions, one must urge the result of experience, since although the hands may not be made bacteriologically sterile after some simple disinfection method, they are clinically sterile, inasmuch as no infection of the wound takes place. It is, therefore, very doubtful whether readers of the book will give up attempts at sterilisation of the hands as useless.

CARRUTHERS ON THE EXAMINATION OF URINE.[1]

THIS little book, consisting of 32 pages, which has been written mainly for the instruction of nurses in the elementary principles of urine examination, may possibly be of service to those for whom it is intended, especially if its readers are able to enjoy a course of practical instruction on the subject. The addition of blank leaves for any special notes which the reader may wish to insert will add to its usefulness. The value of the book would have been considerably enhanced had the author devoted more space to so worthy a subject, and taken greater care to render it grammatically correct.

RAWLING ON LANDMARKS AND SURFACE-MARKINGS OF THE HUMAN BODY.[2]

THE surface-markings of the body are not only of anatomical interest, but of clinical importance, and any work which places them before the practitioner and the student clearly and accurately is to be

[1] "Urine made Easy; a method of Examining Urine with the Common Tests fully described." By Thomas Carruthers, M.A., M.B., Ch.B. London: J. and A. Churchill, 1, Great Marlborough Street.

[2] "Landmarks and Surface Markings of the Human Body." By L. B. Rawling, M.B., B.C.Cantab., F.R.C.S.Eng., Assistant Surgeon to and Senior Demonstrator of Anatomy at St. Bartholomew's Hospital, &c. Pp. 76. Figs. xxix. London: H. K. Lewis. 1904.

welcomed. The author has in this volume succeeded in bringing together practical facts which cannot fail to be of service, and particularly so to the student who has gained a certain academical knowledge of anatomy and is beginning a course of clinical study, and also to the practitioner, who after some years of absence from a school of anatomy is desirous of refreshing his memory. The diagrams are ingenious, distinct and accurate. There is one perhaps slightly wanting in accuracy (fig. xi.), which lacks a branch from the superficial palmar arch to the ulnar side of the little finger. Also in Figs. xxi., xxii., xxiii., there is no indication of the meaning or value of the horizontal line drawn inwards from the left anterior superior iliac spine.

The work concludes with an appendix giving the various lengths of passages, and the dimensions and weights of organs, but it is doubtful whether this serves any useful purpose in such a work as this, and it is not, moreover, complete. The index might, with advantage, be fuller in the matter of cross references. The book is well brought out, and reflects credit upon the author and the publisher.

VINCENT ON THE NUTRITION OF INFANTS.[1]

THE early appearance of the second edition of this work is evidence that it has filled a want. The text has been carefully revised and much additional information inserted. The characteristics of human and cow's milk, and the various methods of modifying the latter to the requirements of the infant are, as before, thoroughly treated. The consequences of ill-feeding in the production of gastric and intestinal disorder, and of rickets and scurvy, also receive full attention.

In the new edition a valuable chapter has been added, in which are discussed many of the details in connection with the recommendation of the Inter-Departmental Committee on Physical Deterioration as to the establishment of milk depôts in every large town.

We recommend Dr. Ralph Vincent's book most cordially to all interested in the question of infant feeding, whether as occurring in private practice or in relation to the public health.

THE SIMPLE MEDICAL YEAR BOOK OR PRIVATE LEDGER.[2]

WE have received from the publishers a copy of a work which should prove useful to many medical men who are anxious to keep a private account of their financial position, so that at any moment and with no difficulty any items of income or expenditure can be estimated.

It is in fact a private ledger, in which a page is allotted to each

[1] "The Nutrition of the Infants." By Ralph Vincent, M.D. Second Edition. Pp. 321. London: Baillière, Tindall & Cox. 1904. Price 10/6.

[2] The Simple Medical Year Book, or Private Medical Ledger," containing a concise abstract of daily, weekly, quarterly, and yearly receipts and expenses. London: John Bale, Sons & Danielsson. 1904. Price 10/6 net.

week, and so apportioned that besides indicating the daily cash and ledger receipts, all the various sources of professional expenditure have been classified and tabulated, thus clearly showing in a systematic way the receipts and expenditure for the year at a minimum outlay of time and trouble. There are pages for quarterly abstracts, totals, and a summary for the year, besides an indexed number of blank sheets for memoranda, and each page is interleaved with blotting paper. Most medical men experience some difficulty in filling up their income-tax returns, and this book, if carefully kept, will be of material help to them in doing so. A very useful addition is a series of notes on the income-tax, giving clearly all the deductions which may legally be made in arriving at an estimate of the amount liable to be assessed for this tax.

The book should be easily posted with but a small expenditure of time and trouble.

SHAW-MACKENZIE ON THE TREATMENT OF INOPERABLE CANCER.[1]

ANY method which holds out a possibility of relief to a hapless patient suffering from inoperable malignant disease is worthy of a trial, and in this brochure the author is able to point to some remarkable cases in which improvement has followed the use of certain drugs by means of hypodermic injections. The author does not claim novelty in this method, as a method, but the object of his publication is to draw professional attention to the use of Chian turpentine in this connection, as introduced by himself, as well as to the hypodermic administration of a sodium oleate (soap) solution which has for some time been successfully employed by Mr. J. H. Webb, of Melbourne.

Not a little interest is awakened by the mention of Chian turpentine, for it will be remembered how some years ago this drug was strongly recommended by the late Mr. Clay, of Birmingham, as of great use in the treatment of cancer, but that how, after an extended trial of it, independent observers were unable to confirm the claims for its usefulness. Thus it quickly passed out of sight as a remedy for cancer. However, it is now interesting to read in this brochure that Mr. Clay's son explains that its failure to prove beneficial in many cases was probably due to the method of its administration, by which, in pill form, the drug passed out of the body unabsorbed; on the other hand, by hypodermic injections there is every opportunity for the drug to produce its full physiological action, whatever that may be, and employed in this way it is interesting to read how beneficial have been the results in cases of inoperable cancer which have been obtained by Dr. Shaw-Mackenzie. With regard to Mr. Webb's treatment, little is known of it in this country, nevertheless, there is one fact about it which certainly claims attention, namely, that in the cases in which it has been put to the test by Dr. Shaw-Mackenzie, he is able to confirm the results obtained and published by Mr. Webb. Herein, then, is a

[1] "Some Methods of Hypodermic Medication in the Treatment of Inoperable Cancer" By John A. Shaw-Mackenzie, M.D. Lond. London: Bailliere, Tindall and Cox. 1904.

substantial reason for others, following the lines laid down in this brochure, giving the methods of treatment described a full trial, at least in the interests of those patients whose pitiable state while suffering from inoperable malignant disease, demands that everything should be done which holds out a prospect of relief, however small.

LIBRARY REPORT.

THERE is no material change in the condition and utility of the Library since the last Report. A list is given below of some new volumes recently purchased, all being desirable additions, which should prove of use to subscribers. A new Rule has come into force allowing two books to be taken out for one month, whether they are subscription copies of Messrs. Lewis or belonging to the Society, at a yearly donation of 5s. per member.

The Librarian wishes to call attention to the fact that subscriptions to the Library Fund are very backward this Session, in spite of the unique advantages presented to the members of being able to borrow any volume they may desire at the absurdly small sum of half-a-crown a year.

HERBERT W. CHAMBERS.

December, 1904. *Hon. Librarian.*

BOOKS RECENTLY PURCHASED.

(1) Taylor, "Applied Anatomy," 1904.
(2) Hewitt, "Anæsthetics," 1901.
(3) Mann, "Forensic Medicine," 1902.
(4) Taylor, F., "Medicine," 1904.
(5) Lewis and Balfour, "Public Health," 1902.

LIST OF SUBSCRIBERS TO LIBRARY.

Dr. Furniss Potter, Dr. Bagram, Dr. Blake, Dr. Gillingham, Dr. J. Sinclair, Dr. Walker, Dr. Carter, Dr. Arthur, Dr. Maguire, Dr. Rock, Dr. Reece, Fleet-Surg. French.

BOOKS RECEIVED.

The After-treatment of Operations. By P. Lockhart Mummery, F.R.C.S. Second Edition.

Notes on Assouan. By G. Dundas Edwards, M.A., M.R.C.S., L.R.C.P.

Medical Electricity. A Practical Handbook for Students and Practitioners. By H. Lewis Jones, M.A., M.D. Fourth Edition.

Malignant Disease of the Larynx. By Philip R. W. De Santi, F.R.C.S.

Medical Hints and Notes on Egypt as a Health Resort. By Arthur J. M. Bentley, M.D.

X-Rays. Their Employment in Cancer and other diseases. By Richard Cowen, L.R.C.S., L.R.C.P.

Enlargement of the Prostate. By C. Mansell Moullin, M.D., F.R.C.S.

A Handbook of Diseases of the Ear. By Richard Lake, F.R.C.S.

Climate and Health in Hot Countries and the Outlines of Tropical Climatology. By Lieut-Col. G. M. Giles, M.B., F.R.C.S., Ind. Med. Service (Retd.)

The Surgery of the Diseases of the Appendix Vermiformis and their Complications. By W. H. Battle, F.R.C.S., and E. M. Corner, M.B., F.R.C.S.

On the Sterilisation of the Hands. By C. Leedham-Green, F.R.C.S.

Urine Made Easy, a Method of Examining Urine with the Common Tests. By Thomas Carruthers, M.A., M.B. Ch.B.

Land Marks and Surface-Markings of the Human Body. By L. B. Rawlings, M.B., B.C., F.R.C.S.

The Simple Medical Year-Book or Private Medical Ledger. Published by Messrs. Bale, Sons and Danielsson.

The Channels of Infection in Tuberculosis. By Hugh Walsham, M.A., M.D.Can., F.R.C.P.

Some Methods of Hypodermic Medication in the Treatment of Inoperable Cancer. By John A. Shaw-Mackenzie, M.D.Lond.

BATHING DURING THE MENSTRUAL PERIOD.—Edgar says that all forms of bathing during the menstrual period are largely a matter of habit, and can usually be acquired by careful and general precaution. But this does not hold good for every woman, and surf bathing, in which the skin remains chilled for some time, should always be excepted. The daily tepid sponge bath (85° to 92° F.) during the menstrual period is not only harmless but is demanded by the rules of hygiene. In most women, if not in all, tepid sponge bathing on the second or third day after the establishment of the flow is a perfectly safe practice, and in most women the habit of using a tepid shower or tub bath after the first day or two of the flow can be acquired with safety.—*Amer. Jour. Obst.*, September, 1904.

THE POST-GRADUATE COLLEGE.

By the Dean.

The October Session commenced on Thursday, October 13, the opening address being delivered by The Right Rev. The Lord Bishop of Oxford, entitled, "The Later Years of a Student's Life." About one hundred gentlemen were present, consisting of past and present members of the Staff and Post-graduate College.

During the past three months seventy-five Post-graduates have attended the College in addition to sixty-six life members. Amongst these have been eight officers of the Naval Medical Service, five in the Royal Army Medical Corps, and six in the Indian Medical Service, in addition to thirteen doctors from the Colonies and abroad.

Special classes have been held in the following subjects: Throat and Ear Diseases (3), Ophthalmoscopy (3), Intestinal Anastomoses (3), Practical Administration of Anæsthetics (2), Skiagraphy (3), Skin (1), Gynæcology (2), Operative Surgery (6), Bacteriology (2), Clinical Examination of Blood and Urine (3), Surface Anatomy (1), Tutorial Medicine (2).

We have to congratulate Mr. E. D. Rutherford and Mr. A. O. Hooper on obtaining Commissions in the Naval Medical Service.

Owing to the large number who have been attending lately, the Committee have felt that the present accommodation was insufficient, and have added a new lecture room, which will enable the present lecture room to be used as a reading and smoking room. This we hope will materially add to the comfort of our members.

The following is a list of Post-graduates who have attended the practice of the West London Hospital during the last three months. An asterisk is placed against the names of those who are Life Members.

*L. H. Armstrong (Ripon).
*D. Arthur, M.D. (Shepherd's Bush).
Lt.-Col. T. Archer (late R.A.M.C.).
*G. Arthur (West Ealing).
T. W. Atkins (Shepherd's Bush).
A. Baldock (Earl's Court).
W. H. Bailey (Southall).
*W. E. Barton (Streatham).
*G. J. Bagram (Bayswater).
A. Geo. Beale (Kensal Rise).
S. H. Belfrage (London).
Wm. Bell (Sloane Square).
*Dep. Ins.-Gen. R. Bentham, R.N.
Fleet-Surgeon R. F. Bowie, R.N.
*R. D. Brinton (S. Kensington).
F. C. Bryan (Bayswater).
*H. F. Browne (Langham Street).
*W. M. Burgess (Harlesden).
*M. G. Cadell (Bayswater).
*Capt. Carmody (late R.A.M.C.).
Surgeon N. Cameron, R.N.
*Major E. R. W. Carroll, I.M.S.
*H. W. Chambers, Hon. Life Member (Shepherd's Bush).
A. Viner Clarke (Wandsworth).
A. H. Copeman (I. of Wight).
*Lt.-Col. Clutterbuck (Newcastle).
*E. J. Coulson (Fulham).
H. Evelyn Crook (Earl's Court).

J. O. Crosswell (Jamaica).
J. S. Curgenven (Bayswater).
G. G. Davidson (West Kensington).
F. S. Dawe (Chiswick).
*L. Dobson (Kensington).
Archd. Donald (Wimbledon).
Staff-Surgeon F. C. Durston, R.N.
M. A. Dutch (Richmond).
C. W. Emlyn (Bayswater).
H. M. Evans (Lowestoft).
Capt. Percy Evans, R.A.M.C.
*A. St. Aubyn Farrer (Paddington).
Staff-Surgeon H. W. Finlayson, R.N.
*W. H. Fitzmaurice (Dunmanway).
Chas. Fort (Willesden).
*Fleet-Surgeon A. M. French, R.N.
W. E. Fry (Hammersmith).
F. Gans (Austria).
*D. Gault (New Zealand).
*H. M. Gay (Southampton).
Major Girvin, R.A.M.C.
Edmund Gonin (Burstow).
Lt.-Col. T. Grainger, I.M.S.
*A. J. Grant (West Kensington).
*W. Grantham-Hill (Chiswick).
S. J. Grinsell (Stutterheim, C.C.).
Fleet-Surgeon H. J. Haddon, R.N.
*C. H. Haines (Kensington).
J. N. Hall (Mayfield).
*C. S. Hancock (Leytonstone).
*W. Allen Harmer (Tonbridge).
*N. Heard (Chiswick).
E. W. Hedley (London).
A. Palmer Henzell (Australia).
A. O. Hooper (Stiffkey).
G. A. Huntley (China).
*W. C. James (Kensington).
*Capt. Johnston, R.A.M.C. (ret.).
*R. A. Kirby (Westminster).
*W. B. Kirkaldy (Kensington).
Alex. Krakowsky (Paarl, C. Colony).
Capt. O. Langston, I.M.S.
*T. M. Legge (Temple).
*T. Ligertwood (Chelsea).
C. A. Lees (West Ealing).
M. J. Longinotto (Strawberry Hill).
Chas. Lovely (Dawlish).
J. M. Lovett (Nottingham).
Lt.-Col. Lougheed, R.A.M.C., C.M.G.
*J. Lynes (Kensington).
*A. Barclay Lyon (Hammersmith).
*Norman Macdonald (Harlesden).
*G. Maguire (Richmond).
*W. Hooper Masters (Barnes).
*E. D. Macdougall (Walton-on-Thames).
D. Macdougall (Dover).
*J. B. Mackay (Isle of Wight).
D. McLean (Melbourne).
*H. J. McNickle (Vauxhall).
*D. F. Maunsell (S. Kensington).
Fleet-Surgeon E. H. Meaden, R.N.
R. G. Meredith (Richmond).
H. T. Merrick (Surbiton).
Captain Angel Morales (Barcelona).
*B. W. Mudd (St. Pancras).
W. Nolan (Kensington).
*W. Norbury (London).
*W. R. Oliver (New South Wales).
J. K. Osborne (New South Wales).
*H. M. Page (Kensington).
H. Compton Parsons (W. Hampstead).
W. Kelley-Patterson (Ballyedmoud Castle).
W. Harland Peake (Hampstead).
H. B. Pearce (London).
Captain Peck, I.M.S.
Wm. Peile (Notting Hill).
*A. F. Penny (Chelsea).
*R. D. Pollock (Acton).
Douglas R. Pike (Kensington).
P. Power (Cork).
E. B. Purdon (Belfast).
E. A. Purcell (Wimbledon).
*A. Renny (Southampton).
*A. H. Rideal (Twickenham).
Arthur Riley (Winton, N. Z.).
R. I. Ritchie (Dunedin).
*Patrick Robertson (Canada).
*A. Tait Robinson (Hyde Park)
Major W. H. B. Robinson, I.M.S.
*Neil Robson (Edinburgh).
*F. E. Rock (Hammersmith).
*T. Mackay Ross (Fulham).
Major H. D. Rowan, R.A.M.C.
E. D. Rutherford (London).
*Lt.-Col. Silcock, I.M.S.
*G. A. Garry Simpson (Acton).
*A. Ross Sinclair (Parson's Green).
*W. Slater (Epping).
Captain J. G. N. Stokes, I.M.S.
Fleet-Surgeon H. S. R. Sparrow, R.N.
*H. H. Sturge (Maida Vale).
*E. Swain (Hampton Hill).
L. S. Talbor (Dunedin).
F. C. Tothill (Staines).
Alex. Urquhart (Shepperton).
*L. A. Walker (Notting Hill).
W. W. Walker (Kensal Rise).
*H. W. Walter (Brentford).
Fleet-Surgeon G. A. Waters, R.N.
*J. Williamson (Putney).
J. A. Wilson (Springburn).
*A. P. Woodeforde (Shepherd's Bush).
Major W. H. E. Woodwright, I.M.S.

NOTES ON NEW PREPARATIONS, &c.

Messrs. Burroughs, Wellcome, & Co.—We have been favoured with several new preparations by this firm, which we think of interest to our readers.

1. "Soloid" Ehrlich Triple Stain. Many practitioners would perhaps take more interest in making blood-counts were they not deterred by the thought of the difficulties associated with the methods employed. The "Soloid" we are describing is an ingenious solution, to some extent, of the difficulties experienced, as by means of it and a little ingenuity the Biondi—Ehrlich—Heidenhain Triple Stain can be used with good results.

One "Soloid" Ehrlich Triple Stain should be dissolved in 25 cc. of distilled water; one "Soloid" Acid Fuchsine in 2 cc. of distilled water; and the two solutions mixed. The mixture is ready for use and keeps well.

Blood films may be prepared in the usual manner, and then fixed by heating them to 110° C. to 120° C. for thirty minutes. An air oven can be conveniently dispensed with by using a strip of stout sheet copper, and heating one end. The place on the copper for fixing the films at this temperature will be found by dropping a little xylol on the copper, and placing the preparation film side downwards near the spot at which the xylol just boils. Preparations thus fixed are then stained for two to ten minutes, washed and dried. Care should be taken to use neutral Canada balsam or cedar wood oil as a mounting medium. In well-fixed and successfully stained specimens the colour to the naked eye is orange or orange-red; in under-heated specimens the colour is dark red or reddish-brown; and in over-heated specimens the colour is pale lemon-yellow. In specimens thus prepared the erythrocytes should be coloured orange, the granules of the neutrophile polymorphonuclear cells and of the neutrophile myelocytes should have a violet, and the acidophile granules of the polymorphonuclear cells a brick-red colour. The nuclei of the above cells are coloured greenish-blue of varying shades, while the basophilic granules of most cells are unstained, and surround a pale green nucleus. In the lymphocytes the nucleus is stained a pale greenish-blue, but the cytoplasm takes a faint pink or grey colour. In morbid blood the nuclei of the erythroblasts are stained a greenish-black.

2. Kepler Malt Extract with Hæmoglobin. One of the objections to hæmoglobin preparations in the treatment of debility has always been the somewhat nauseous taste. The combination of hæmoglobin with malt extract in this preparation gives us a palatable preparation of a stable character.

The valuable properties of Kepler Malt Extract are too well known to require much mention. It is sufficient to say that it contains the true malt diastase, and is rich in maltose, phosphates and albuminoids. By the combination of the malt extract with hæmoglobin we have both a food and a tonic preparation of great value. The dose is ʒi.—ʒiv. for adults and correspondingly reduced doses for children. The preparation may be taken alone, or mixed with water or milk, after food, two or three times a day.

Gratifying evidence of the recognition extended to British commercial enterprise is furnished by the honours awarded by the St. Louis Exhibition to this firm's exhibit of "Wellcome" Brand Chemicals, "Tabloid" and other pharmaceutical products, and "Tabloid" Medical Equipments. Three grand prizes and three gold medals have been conferred for the scientific excellence of these products.

The Seltzogene Patent Charges Company, St. Helen's, Lancs.—The desirability of a course of sulphur baths for a patient is continually cropping up in everyone's practice, and, as a rule, is met by dissolving so much potassa sulphurata in a given quantity of water, the results obtained from such a solution being, usually, rather disappointing.

For some years now the Seltzogene Patent Charges Company have placed before the medical profession a most excellent preparation termed "Sulphaqua." It is put up in packets containing a dozen charges, and can be used with the greatest ease in any household.

After a considerable experience of Sulphaqua, it gives us much pleasure to report in unqualified terms in its favour.

Method of using the charges.—Dissolve each powder separately in a pint of hot water. Mix the two solutions together by pouring backwards and forwards, one into the other, then, after a few seconds, pour the mixture into an ordinary bath containing 10 to 20 gallons of water. This charge may be doubled or halved according to the severity of the case and the sensitiveness of the patient. The bath should then be taken at once. Soap, as a rule, is better avoided in using this bath, but, if deemed necessary, the manufacturers have provided a specially prepared "Sulphaqua" soap which may be used. It should be noted that the charges should not be removed from the cases until they are required for use, as they spoil on exposure to the air. The sulphur is corked in a nascent condition, and a certain amount of free sulphurous acid is also given off. The sulphur does not blacken paint or enamel of domestic baths—a very desirable fact. In the treatment of scabies and acne vulgaris we have found these

charges excellent, and in carrying out as nearly as possible the routine methods of mercurial inunction in syphilis by the system followed at Aix-la-Chapelle, we have been exceedingly pleased with the results obtained. It only remains to add that the price is very reasonable. Twelve charges, each sufficient for a 20-gallon bath, cost only 4s. Toilet charges, for use in small baths or basins, can be obtained for 3s. per dozen. The sulphur preparations are increasingly used in all conditions where nascent sulphur baths are required. It is fair to state that the manufacturers advertise them solely to the medical profession, and we are glad to give them our hearty commendation and support.

YET another proof of the superiority of standard British products comes to us from the United States. The expert Committee of the World's Fair at St. Louis, have awarded the Grand Prix to the old firm of Mellin's for the excellence of the well-known splendid article—Mellin's Food. This honour represents the highest award conferred at the Exposition; a greater distinction, in fact, than the Gold Medal. Mellin's secured the Prix over all competitors, and also received the Gold Medal for Mellin's Food Biscuits, Mellin's Chocolate, and a Silver Medal for "Lacto."

Hospital and Domestic Disinfection.—By the courtesy of a correspondent we are able to describe an interesting demonstration of an apparatus suitable for this purpose which took place in July at the Bradford Fever Hospital, by the permission of Dr. Arnold Evans, the Medical Officer of Health to the City of Bradford, who supervised the arrangements at the hospital, and together with Dr. Simpson, the Professor of Hygiene at King's College, London, provided the cultures of different diseases employed in the demonstration.

The apparatus employed is known as the Clayton Disinfecting Machine, which has been introduced by the Clayton Fire Extinguishing and Ventilating Co., Ltd., 22, Craven Street, London, the plant itself being manufactured by Messrs. Thwaites Brothers, Ltd., of Bradford.

The custom of burning sulphur for the purpose of disinfection is well known, but owing to the crude method of application, such as burning it in an open tray in the chamber requiring disinfecting, this method has not always been entirely efficacious, owing to the very small degree of penetration into such articles as bedding or mattresses which a merely sulphurous atmosphere possesses. There is consequently no guarantee that sulphur burning as hitherto practised is sufficient, whilst chemical preparations such as

formaldehyde, although reliable disinfectants, equally fail as regards penetration.

The principle of the Clayton apparatus not only makes penetration an essential feature of its employment, but also ensures the exposure of every cubic foot of atmosphere to be disinfected to a sulphurous atmosphere in a furnace at an exceedingly high temperature.

The apparatus as employed at Bradford is mounted upon a neat carriage, which can be easily drawn by men on a level road, and consists essentially of three parts, the sulphur furnace, the cooler and the blower, which is driven by any form of power convenient to the purchaser. The furnace is a small oven of steel plates in which the sulphur is burned. The sulphur gas, generated by combustion, is drawn by the blower through the tubes of a water cooler, and then passed by tubing through a window or any convenient aperture into the chamber to be disinfected. The necessary air to promote the combustion of the sulphur is provided, not from the outside, but by a return pipe from the chamber into the sulphur furnace, ensuring thereby complete destruction of all floating germs or dust from blankets, &c.; the course of the air is therefore a complete cycle from the chamber to the furnace where it is burned and sulphurised, then through the cooler, which prevents not only the carrying forward of flowers of sulphur, but also cools the gas sufficiently to pass through the blower at a normal temperature, and enables the percentage of sulphur gas in the room to be accurately determined. The gas then passes to the ward, where it is delivered in a cooled state, thereby avoiding condensation. Towards the end of the operation fresh air has to be admitted to the furnace, otherwise the gas-charged air coming from the ward would extinguish the sulphur in the furnace; this and the course of the gas is controlled by a series of small shutters or valves, perfectly easy of manipulation by the attendant.

The ward of the hospital at Bradford contained about 14,500 cubic feet, and previous to being finally closed up, cultures of diphtheria, typhoid, tuberculosis, plague, cholera and *Staphylococcus aureus*, in gelatine and in wet and dry cloths, were exposed in and on mattresses, cupboards, and wrapped in some instances in as many as twenty-four folds of blankets, the cultures being contained in test tubes plugged by cotton-wool. After sealing up all the entrances and window frames, the generation of sulphur gas was commenced at 12.30, and continued without intermission till 6.30, the percentage of gas in the ward rising from 4 per cent. at 2.30 to 11 per cent. at 4.15, at which percentage it was kept constant until stopping. As the volume of air passed by the blower amounted to about 4,500 cubic

feet per hour, it will be seen that the whole volume of the air in the ward was passed through the sulphur furnace and exposed to a temperature of about 2,000° F. The ward was then left closed for the night and opened the next morning by Dr. Evans, who removed the cultures exposed. The bacteriological examination of the cultures showed that none of them exhibited any signs of life, and that the disinfecting power of the gas was proved to be effective, whilst all the controls or duplicate tests which were not exposed to the process were found to be effective. The penetrating qualities of the gas were particularly exhibited by the sterilisation of the bacteria enclosed in twenty-four folds of blankets.

We are informed by the Clayton Co. that apparatus similar to this, but of larger size, have been supplied, among others, to the sanitary authorities of Hong Kong, Mauritius, Singapore and several of the South American ports, and that in Peru and other plague-infested places it is a government regulation that all coasting steamers shall carry a Clayton apparatus for disinfection of the holds, and also that previously to their being broken up the floating small-pox hospitals in London were subjected to the treatment, proper tests being kept to make certain that all wood-work was thoroughly exposed to the gas before being allowed to be disposed of. Several of the ships carrying coolies to South Africa are also fitted with the plant.

The portability of the apparatus is such that it can easily be moved from place to place, and should commend itself to all Medical Officers of Health. Not only rooms, but complete houses can be easily treated without disturbance of furniture, damage to paintings, carpets or curtains, thus obviating the troublesome, expensive and destructive system of removing infected bedding, &c., to be stored at special places for the purpose.

As regards the great national pest of small-pox, although the specific bacillus has not yet been identified, it is of interest to note that vaccine has been rendered inoperative by exposure to this gas.

As regards vermin and rats it is evident that such a process is invaluable, particularly as the victims prefer to die in the open instead of retiring to their holes. A ship recently coming from the East was treated with cargo on board, with the result that over two thousand rats were found lying dead on the top of the packages in the hold, whilst beetles by the hundredweight were taken up in the galley. It is obvious that such a treatment of a vessel should afford a very safe guarantee against plague being imported by rats on board ship.

We understand that the process has also been most effec-

tively employed for extinction of fire on board ship, thus obviating any necessity for flooding holds with water, or damaging the cargo in any way.

NOTES AND NEWS.

THE Annual Dinner which will take place on February 8, 1905, is to be held at the Great Central Hotel in the Marylebone Road. This should prove a considerable attraction, as the hotel is of easy access, situated as it is close to the Baker Street Station of the Metropolitan and District Railway, and in the heart of the consultants' quarter. Moreover, the hotel is fast becoming recognised as one of *the* dining places in London where the cuisine is of the highest order, and the rooms are sumptuously decorated and furnished. We hope that the President, Mr. C. M. Tuke, will be supported by a large gathering of members.

IT has been decided to have no set subject for discussion on the night of the February meeting, but that which was suggested, namely, Oral Sepsis, is an interesting one at the present time and would probably have brought together a large gathering. It was one of the subjects chosen for debate at the last meeting of the British Medical Association, and many novel theories were then put forward. Year by year septic conditions seem to come more and more under the domain of the physician, and Dr. Hunter, who recently read a paper before this Society on Pernicious Anæmia, pointing out that this was probably due to oral sepsis, was one of the first to trace the dependence of many diseases, such as some forms of pneumonia, on septic conditions of the mouth. It will probably be proved hereafter that other septic conditions, which have previously been accounted for with difficulty, will be traced to infection from the buccal cavity. In connection with this Dr. Mervyn Gordon's experiments of microbic infection by the breath, as quoted by Dr. Reece in his paper on Scarlet Fever in the last number of the Journal, are interesting. He stated that an experimenter, whose throat and mouth were washed out with an emulsion of *Bacillus prodigiosus* was able, by speaking aloud, to infect sterile agar plates exposed at various distances and levels in a large hall,

thus showing how real was the possibility of air-borne infection occurring indoors from the dissemination of droplets of mucus from the mouth.

From this and other experiments he considers that if we could get efficient disinfection of the pharyngeal mucous membrane and the buccal cavities at the commencement of scarlet fever, we should be able to prevent, not only nose and ear troubles, but the fatal septicæmia to which the majority of deaths from scarlet fever appear to be due, which itself is caused by a streptococcus invasion starting from the pharyngeal mucous membrane.

The time has surely arrived when some sort of instruction should be given to the lower classes on the care of the teeth and hygiene of the mouth, as it is sorely needed. With this class there is practically no such thing as conservative dentistry, the latter word with them being synonymous with extraction. How common it is at the present day to see women of the lower classes at the age of 30 with toothless gums, and it is rare to find a domestic servant with a decent set of natural teeth, yet it it just that class that suffers from anæmia, gastritis, ulceration of the stomach, and the whole train of ills following on deficient dentition. To them the use of the tooth-brush is practically unknown, and the necessity of replacing the teeth with new ones never seems to occur to them. At the same time it must be admitted that it is extremely difficult for a poor person to acquire skilled dental aid. We have, it is true, the special dental hospitals and dental departments of the general hospitals, but they are a drop in the ocean of need, since they do not supply artificial teeth gratis. Thus we have the fact that whilst medical and surgical aid of the most skilled type is attainable by the poor, conservative dental aid is most difficult to get, unless the patient has some means. A great deal, however, might be done in lessening the amount of disease by suitable instruction to the children in Board Schools on the hygiene of the mouth.

Dr. William Osler, F.R.S., who will be remembered as having delivered the Cavendish Lecture in 1899, and who is an honorary member of this Society, has been appointed Regius Professor of Physic in the Oxford University, and has,

therefore resigned his post of Professor of Medicine in the Johns Hopkins University, Baltimore.

Dr. RUSSELL's Paper on the Diagnosis of Acute Abdominal Disease proved to be of great interest, and attracted a large meeting of members. The paper will be found in full on p. 1.

The subject was so large, and the paper took so long to read, that but little time was left for discussion, which was a great pity, for we know that several members were anxious to join in the discussion who were prevented by want of time. As usual, the dread question of the administration of opium took up most of the time, and, as usual, with one exception, was condemned by the surgeons who entered into the discussion. We cannot help thinking that this question is generally discussed as if every patient was a hospital case, whereas undoubtedly the patient in private may often be treated in a manner somewhat different to that necessary for one who will probably be moved into a hospital under the care of some one who will know little of the past history of the case. We should have liked to have heard the views of several of the able general practitioners who were present on the subject, but, unfortunately, the discussion was maintained almost entirely by surgeons, who seemed hardly to recognise the difficult position of the medical attendant called in to the case. The patient is generally in extreme pain, and both he and his friends would probably resent it exceedingly were they told that no relief was to be given, as it was necessary to watch the course of the disease. We are, of course, not advocating the wholesale drugging of a patient suffering from acute abdominal disease with opium, but frequently, in our experience, one good dose will calm the patient, ease his pain, and enable us to get a more accurate description of the past history than would otherwise be the case; and there are numberless cases which have been saved from becoming acute by the timely and judicious use of opium.

We were also surprised that no mention was made of the examination of the blood for leucocytosis, as being one of the surest methods of enabling us to arrive at an accurate estimation of the progress of a case of acute abdominal trouble. This can always be carried out when it has been necessary to give opium in any quantity.

Senhor MANUEL GARCIA, the inventor of the laryngoscope, will attain his *hundredth* birthday on the 17th of March, 1905, and the Laryngological Society have decided that this event shall be marked by a fitting celebration, by presenting Senhor Garcia with his portrait, to be painted by Mr. John Sargent, R.A.; also with addresses from the various Laryngological Societies and medical bodies, and by holding a festival dinner in honour of the event. It may be of interest to know that Senhor Garcia read his paper, entitled "Physiological Observations on the Human Voice," before the Royal Society in 1854; this was published in 1855, so that this year may be looked upon as the Jubilee Year of the Laryngoscope. Although this may perhaps be chiefly of interest to laryngologists, yet it cannot fail to be recognised by the whole of the medical profession as an occasion on which to do honour to one who, by his invention, rendered an inestimable service to humanity and contributed so invaluable an addition to medical science.

Mr. W. R. D. Stewart, of 42, Devonshire Street, W., is the Honorary Secretary to the Testimonial Fund, and will be glad to give any further information on the subject of the celebration.

THE following is taken from the *British Medical Journal*:—"THE BACTERIOLOGIST AT LARGE.—Dr. Vidal, of Nisson, who appears to be a fine old country doctor, all of the olden time, gives the following account of a recent encounter with a wild bacteriologist. The incident so admirably illustrates the contrast between the old style and the new in medical practice, that we venture to tell the story here as it may tend to the edification of some of our readers. A child, aged ten, had a bilious attack, which the over-anxious parents took it into their heads to be a manifestation of tuberculous meningitis. Behind the back of Dr. Vidal, who was their ordinary attendant, they sought counsel of a young physician in a neighbouring town. The opinion of this pundit was conveyed to Dr. Vidal on a card enclosed in an unsealed envelope. It was in the following terms: 'Kernig positive; slight embryocardia, especially in Azoulay's position; cryoscopy and Kochibaccilloscopy of Quincke's fluid would supply basis for judgment. If negative, Eberth or Talamon-Fraenkel might be thought of. In the former of these two hypotheses, I could bring, on receiving intimation from you, some Chantemesse serum; in the second, I could bring specialist to do Quincke's puncture.' To this cryptic message Dr. Vidal sent the following reply: 'Veni, vidi, vici. *Veni:* neither on bike, nor auto, nor motor, nor in a boat, but in a phæton. *Vidi:* neither myosis, nor midriasis, nor vasomotor

red line, nor Wunderlich—simple synocha. *Vici!* Naturam sequere. Expectant treatment. The patient goes on under his blankets ἐξακινητου ποδός (without stirring a step), in the words of Sophocles, whom in spite of his antiquity I love, towards *restitutio in integrum.* Archfraternal thanks to the Quincke specialist.' We need not dwell on the piquant contrast here presented between the old and the new generation of practitioners. The country doctor's wit may be a trifle laboured, but there can, we think, be no doubt that he had the best of the encounter, and that his sound clinical sense shows well against the laboratory jargon of the younger man who saw bacteriological torpedoes where there was only a patient with a stomach-ache."

We have a lively recollection of meeting in consultation a young medical bacteriologist, who was called in by the relatives of a patient dying from ulcerative endocarditis as a last hope. He arrived with a huge bag, containing a microscope and all the necessary apparatus for an elaborate examination of the blood. This occupied the best part of an hour and a half, and at the end we were presented with an opinion of a somewhat similar nature to the above, with the addition, however, that we were advised to try some proprietary drug with a high-sounding name, to be obtained only from a firm in Germany. Our patient solved the difficulty of getting this medicine by dying within an hour of the departure of the consultant.

There is a certain amount of interest to the medical profession in a case which was recently heard before the Lord Chief Justice. It was an action to recover a sum of money due on a policy, which contained the usual clause that the statements made to the company and to their medical officer, on the usual form, formed part of the contract. In this case the deceased in his answers stated that he had never met with an accident, nor had he an illness or disease, or consulted a medical man for the last five years. He died shortly after completing his policy, and the claim was disputed on the grounds that two years before he had been attended for a severe injury to the thumb, and one month before taking out the policy he was laid up with synovitis of the knee-joint. The special jury in the case found that the questions had been answered correctly, but the Chief Justice ignored the jury's verdict, and gave judgment for the Insurance Company. It is better, therefore, that patients, when applying for an insurance

policy, should be advised to state openly everything that has occurred, as it thus leaves no ground for after dispute. It is quite possible, in the case quoted above, that no addition would have been made to the premiums had the assured made mention of his accidents.

THE TREATMENT OF LARGE PELVIC ABSCESSES OF APPENDICULAR ORIGIN.—Chaput is of opinion that purulent accumulations in the pelvis following appendicitis may be best dealt with in the adult female by vaginal, and, in the young woman and the male, by rectal incision. In such cases the usual method of attacking the abscess through a median or lateral incision of the anterior abdominal wall is open, the author holds, to several objections. As it is necessary to drain the abscess the abdominal incision must weaken the anterior wall and expose the patient to the risk of eventration; it is liable, also, to result in stercoral abscess. It is unfavourable to free drainage, the opening being above and not at a dependent part of the purulent collection, and, consequently, the surgeon is often obliged to make a counter-opening, either in the vagina in the female or in the perineum or the sacral region in the male. There is also a risk in the abdominal incision of destroying the protective intestinal adhesions and of inoculating the peritoneum. The after-treatment with the abdominal incision is often prolonged over several months, whilst with the vaginal or the rectal incision, cure, it is stated, may be effected in eight or ten days. Whilst the abdominal method is attended by considerable mortality—about 33 per cent.—the methods advocated by Chaput are regarded as absolutely safe. A further advantage of the vaginal or the rectal incision over the abdominal method is the possibility of relieving the patient without administering a general anæsthetic.—*Bull. et Mém. de la Soc. de Chir.*, No. 22, 1904.

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Original Communications.

EXTRAUTERINE FŒTATION.[1]

By JOHN D. MALCOLM, F.R.C.S.Edin.
Surgeon to the Samaritan Free Hospital.

I PROPOSE to divide my observations on the subject of extrauterine fœtation into—(1) a short description of the natural history of this condition, if I may so speak of phenomena which are altogether unnatural; (2) the points on which we may found a diagnosis; and (3) the indications for treatment.

In the majority of cases of extrauterine fœtation, an ovum develops in that part of one of the Fallopian tubes which is outside the uterine wall. A gestation may be found also in the portion of the tube which passes through the wall of the uterus. In both positions the pregnancy may be described as "tubal," but in the latter it is not strictly extrauterine. It is, however, correctly described as "ectopic" (out of place), "intramural" or "interstitial."

Within the last few years it has been shown that an ovum may be impregnated and may develop within the ovary. At present it has not been proved that a primary abdominal gestation may occur. By a primary abdominal gestation I

[1] Read at the West London Medico-Chirurgical Society, on February 3, 1905.

mean that an ovum, having been discharged from its Graafian follicle, and having been impregnated either before or after its discharge, comes into contact with a peritoneal surface, and there fixes itself and develops. It seems to me, however, not only possible, but highly probable, that the occurrence of a primary abdominal gestation will be demonstrated on some future occasion. The impregnated ovum seems to require only a tissue on which it may implant itself, a good supply of blood, and room to develop; and it would appear that these conditions may be obtained on a peritoneal surface.

However this may be, as a rule in these cases the ovum develops in a Fallopian tube. Some mechanical obstruction in the lumen of the latter seems a likely explanation of the abnormality, but very little accurate information has been obtained on this point.

On the other hand, much light has been thrown in recent years on the question of the mode of attachment of the ovum to the uterus and to the Fallopian tube.

In 1899, Peters described the youngest human ovum, developing in the uterus, that has been submitted to detailed scientific examination, and, chiefly as a consequence of his observations, it is now believed that the fertilised ovum is not received by a decidua previously prepared for it, as was formerly taught, but that it buries itself in the mucous membrane of the uterus and that the development of the decidua is stimulated by the fact that the patient is pregnant.

The process of implantation is attributed to a phagocytic action, a power of eating into the tissues, on the part of certain cells which develop on the surface of the ovum. These cells are said to arise from the primitive chorion or outer wall, and they have been called the trophoblast. The cells of this trophoblast are at first not differentiated, but later, they are divided into Langhan's layer and the syncytium, structures which have been described and named only within a very few years. It is important that we should clearly understand the position and nature of the parts so named, not only with reference to the subject under consideration, but also because they are constantly mentioned in discussions on "deciduoma malignum," otherwise called "chorion-epithelioma," a form of new growth which has also been recognised and described very recently.

It is particularly to be noted, therefore, that the outer surface of the outer membrane of the ovum becomes enveloped by proliferating cells, which constitute a tissue named the "trophoblast," and which are subsequently separated into two layers. The layer nearest the ovum consists of large cells with well-defined bodies and big, distinct nuclei. Those cells, in a single sheet, cover the chorion and the villi which develop on it, and they constitute "Langhan's layer" of cells. Langhan's cells, when isolated, are very difficult to distinguish from the decidual cells which are developed from the connective tissue of the mucous membrane of the uterus, and the similarity between the two was, in part at least, the cause of chorion-epithelioma being, as is now believed, misnamed a deciduoma.

Outside Langhan's layer of single well-differentiated cells, and forming a further covering to the ovum, there is a layer of protoplasmic tissue, also with large distinct nuclei, but without any separation of the cell bodies.

These are joined together in a way that may be compared to the fusion of leucocytes which may be seen when the blood is examined, under the microscope, in the web of a frog's foot that has been subjected to a slight irritation.[1] These fused cells outside Langhan's layer constitute the "syncytium." Moreover, from the researches of Metschnikoff we now know that masses of leucocytes exercise a phagocytic power in such natural processes as the removal of the tail of the young batrachian, and the syncytial cells resemble the fused leucocytes in the fact that they also have a phagocytic power. It is by means of this power of eating into the tissues that the ovum introduces itself into the mucous membrane and buries itself in this membrane. The decidna reflexa which was supposed to grow up around, and cover in the ovum, is no longer believed to exist. It is also by means of the phagocytic power of the syncytial cells that the villi of the chorion are introduced into the blood sinuses which form in the decidua. The walls of these sinuses are first eroded by the syncytial cells, and then the villi grow into them.

After a time, when their work is done, Langhan's layer and the syncytium atrophy, the villi are left free in the blood

[1] *Philosophical Transactions*, vol. cxlviii., p. 671.

sinuses, and thus the necessary intimate relations between the vascular systems of the fœtus and of its mother are established.

When an impregnated ovum is arrested in its passage through the Fallopian tube, it immediately begins to eat its way into the mucous membrane, but this tissue in the Fallopian tube is not so constructed that it can form a proper decidua.

Dr. Russel Andrews describes the submucous tissue of the Fallopian tube between the plicæ as having so little connective tissue that "a compact layer of decidua between the folds would very often be mechanically impossible."[1]

In the absence of a proper decidua in the mucous membrane the ovum penetrates into the muscular wall of the tube, by means of its plasmodial covering of syncytial or phagocytic cells.

The mechanism by which this is effected explains many of the phenomena connected with an extrauterine fœtation that were formerly not understood. The pressure of the developing ovum and a separation of the placenta from the site of its insertion, were recently considered the chief factors in the production of rupture and of hæmorrhage as results of a tubal pregnancy.

It is now an obvious criticism that a slowly developing distension of a Fallopian tube, such as may occur in a case of pyosalpinx for instance, will dilate its walls to a much larger size than that at which an extrauterine gestation usually causes rupture, and that the pressure accumulating within the tube would probably lead invariably to the death of the fœtus.

Now, however, we know that the ovum has a power of eating into the tissues, that it embeds itself in the comparatively thin wall of the Fallopian tube, and that one of the special functions of the syncytium, or outer layer of cells covering the ovum, is to erode the walls of vessels so as to enable the villi to be introduced into their blood stream.

In the normal decidua in the uterus the vascular sinuses are designed to be so treated. Externally they are supported by the uterine muscle, more immediately they are surrounded by the decidual cells, and the decidua is so thick that the villi do not in normal conditions reach the muscular tissue. But

[1] *Obstet. Soc. Trans.*, vol. xlv., pp. 205, 206.

in the Fallopian tube the circumstances are different. The villi may actually penetrate to the peritoneum. Apart from this, they are liable to encounter vessels that are not intended to be eaten into by them.

The force of the blood current in some of these vessels is so great that, when their walls are weakened, hæmorrhage is very likely to arise, either immediately or as a consequence of some temporarily increased pressure. There is no doubt that arteries of considerable size may be opened in this way, for they have been seen spouting, when the parts were exposed by abdominal section.

Changes of pressure are very frequent in the pelvis. As in other parts of the body, any excitement or unusual exertion may increase the force of the blood stream. There is also the disturbance consequent on menstruation, which usually continues in an irregular way after a tubal pregnancy has developed. Moreover, this condition is invariably accompanied by an enlargement of the uterine and ovarian arteries, and, finally, there are unavoidable changes of intrapelvic pressure associated with defæcation.

Although any increase of tension, either in the vessels or on the affected tube, may precipitate a hæmorrhage, the real cause is the weakening of the vessel walls by the phagocytic action of the syncytial cells.

The bleeding may take place into the tube or through a rupture of the tube wall according as the phagocytic action affects a vessel near the mucous membrane, or one near the peritoneum.

In the first case a tubal abortion takes place, that is to say a fœtus, or a mole, with more or less of blood, is set free in the tube, from which it may or may not be discharged into the peritoneal cavity through the fimbriated extremity.

When the tube ruptures, the hæmorrhage takes place directly into the peritoneal space, the fœtus as a rule being discharged in this case also. Very often, however, the only definite evidence of the cause of trouble is the presence of chorionic villi in the blood clot or in the wall of the tube, and these can only be demonstrated by microscopic examination and may be very difficult to find.

The circumstances also explain the fact that rupture of the tube and a fatal hæmorrhage induced by an extrauterine

fœtation occur less often in the later months of gestation. These complications in their most serious aspects are connected with the formation of the placenta rather than with its growth. Clarence Webster, in 1895, described the epithelial covering of the chorion as consisting of a *plasmodial* layer of cells, and he also described a layer of more or less differentiated cells internal to the plasmodial tissue.[1]

These appear to be the syncytium and Langhan's layer, and Webster further pointed out that as pregnancy advances "the epithelial covering thins. About the third month the outer nuclei are often flattened somewhat parallel to the surface. For the most part it gets to consist only of a single layer of deeply stained cubical or flattened cells, whose outline can usually be distinguished."[2] Thus the disappearance of the phagocytic cells is coincident with the termination of the period of greatest risk of hæmorrhage, for an extrauterine fœtation terminates in death from hæmorrhage, caused by a rupture of the tube, much less frequently after the third month of its development than before this time.

When an abortion, with or without rupture, takes place, more or less blood may escape into the peritoneal cavity, or if the fimbriated extremity of the tube be closed a hæmatosalpinx will form.

The loss of blood may be repeated, but a hæmorrhage, whether severe or slight, may cease and not recur.

When the patient recovers from a hæmorrhage into the peritoneal space, it would appear that the blood serum is separated and rapidly absorbed, whilst the clot remains near its source of origin and is removed more slowly. After a short time the surface of the clot becomes transformed into a well-defined membrane by an exudation of lymph and a partial organisation of the part nearest the peritoneum, and so a capsule is formed. The central portion remains as a dark-coloured blood-clot, which gradually changes to a thick fluid of syrupy consistence. The capsule may be firmly or very loosely attached to the adjacent peritoneum. I have seen such a capsule with an opening in its circumference corresponding to the mouth of the Fallopian tube, and

[1] Clarence Webster, Ectopic Pregnancy, Pp. 134, 143.
[2] Clarence Webster, *l.c.*, p. 146.

showing, as I stated on a former occasion,[1] exactly the appearance of having been blown out like a soap bubble. In that particular case the adhesions were very easily separated.

When the developing ovum and placenta have survived the third month, the chances of a progress to full term are greatly increased. But the Fallopian tube is not capable of containing a full term fœtus, and, as I have already remarked, the pressure induced in a slowly but persistently distending tube would appear to be sufficient to destroy the vitality of the ovum. This probably is one of the causes of death of the fœtus.

But, although a hæmorrhage may not arise as a consequence of erosion of a large vessel, it is obvious that the phagocytic action of the syncytial tissue may cause a thinning of the wall of the tube to such a degree that the latter may give way to the gradually increasing pressure of the growing fœtation.

A rupture thus induced, especially if precipitated by some change of pressure, such as may be caused by an act of defæcation, might give rise to a complete expulsion of the fœtus from its membranes and a consequent death of the former. Under such circumstances another cause of hæmorrhage may arise, namely, the separation of the placenta from its attachments. This complication is apt to take place throughout the remaining part of the life of an extrauterine fœtation, just as more or less hæmorrhage accompanies an ordinary abortion. The bleeding has a tendency to stop spontaneously, and I think it is seldom of that supremely dangerous type which characterises the hæmorrhage from a large vessel pierced by the syncytial tissue.

But if a rupture takes place gradually, and if the amnion, which is a thin, transparent, but fairly tough membrane, remains intact, the ovum may be pushed through the wall of the tube, and if the connections of the placenta are not disturbed the fœtus may live and develop to term. Dr. J. W. Taylor has shown that in cases in which a fœtus was formerly supposed to develop free amongst the intestines it was really covered by its amnion, and he argued that the persistence of this membrane is sufficient to preserve the vitality of its

[1] *Brit. Med. Journ.*, 1901, vol. ii., p. 68.

contents, always provided that the placental attachments are not disturbed. His observations also led to the conclusion that the persistence of a perfect amnion is essential to the life of the fœtus.

The amnion is naturally separated from the chorion in the early stages of development, and they gradually approach each other very much as the air-tight bladder is applied to the leather of a football. Finally they become more or less intimately united; and apparently the amnion may be in contact with and supported by the peritoneum also, without causing any irritation. Probably the space between the amnion and the chorion in normal conditions is at first of the nature of a serous cavity.

There can, at least, be no doubt that a fœtus may develop to full time without other protection from the peritoneum than the amnion. Possibly in some cases in which the fœtus is enveloped in a thicker capsule this may be constituted of both chorion and amnion. Parts of the chorion may be non-adherent to the interior of the uterus in normal conditions.

When a gestation sac is protruded through the wall of a Fallopian tube at an early stage of development, whilst the placenta is still forming, it is obvious that the interior of the tube may not be able to afford sufficient space for its attachment, and it must then spread to neighbouring structures. Under such circumstances the placenta would become attached, haphazard, to the nearest tissues. This opens up an infinity of varieties of its connections that may occur. Naturally the placenta may spread to the adjoining peritoneum of the tube or uterus, but it may also seize upon the omentum or intestine. Dr. Cuthburt Lockyer[1] has described a case in which the omentum was involved. In this case the operation was performed for hæmorrhage, and it was found that the placenta had been recently separated from the broad ligament. It was regarded as certain that the pregnancy had begun in the tube. In a case published by Dr. J. W. Taylor,[2] the omentum also formed one of the most important attachments of the placenta. It has been suggested that a developing ovum may be discharged from a Fallopian tube, either

[1] *Obstet. Soc. Trans.*, 1893, p. 400.
[2] *Obstet. Soc. Trans.*, vol. xxxix., p. 178.

through the fimbriated extremity or through a rupture, that the tube may return to a normal condition, and that the gestation sac may affix itself to the peritoneum and continue to grow. Such a complete transplantation of the developing ovum seems to me a far less likely occurrence than its development on a peritoneal surface from the first.

Mr. Bland Sutton has shown[1] that in rabbits, hares, cats and dogs, fœtuses may escape into the peritoneal cavity from the uterus through a rupture of the latter, and the opening in the uterine wall may be closed completely. He argues from this that fœtuses that appear to be quite free from the uterus may nevertheless have developed in it, but it is not maintained that these fœtuses have lived after their escape from the uterus, and the observations do not seem to me to afford any proof that a living fœtus may commence to grow in a uterus or in a tube and may be transplanted elsewhere and continue to live. A remarkable case described by Leopold, was referred to by Mr. Bland Sutton,[1] in which a fœtus developed to term, and after its death was found in a sac behind the uterus, whilst the placenta was within the uterus, the umbilical cord passing through an opening in the posterior wall of the womb. There was a history of an injury to the abdomen at the fourth month of gestation.

In 1875, Dr. Gallabin published a case in which also there was a communication, through the anterior uterine wall, between the cavity of the womb and an extrauterine gestation sac, but in this case the placenta was extrauterine.[2] These cases seem to me to afford no evidence that a living ovum may be transplanted. Under very unusual circumstances the attachments of the placenta might extend to fresh tissue, and the part to which it was originally fixed might become free by accidental processes, but this would be a creeping from surface to surface and not a true transplantation.

There are many cases in which the fœtus has been found in process of gradual extrusion from the fimbriated end of a Fallopian tube, and in one case recorded by Braxton Hicks,[3] a fœtus was found in the uterine cavity, whilst the placenta

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[1] *Lancet*, December 10, 1904, p. 1625.
[2] *Obstet. Soc. Trans.*, vol. xvii., pp. 170 and 384.
[3] *Obstet. Soc. Trans.*, vol. ix., p. 57.

had developed to between the fourth and fifth months in the interstitial part of the Fallopian tube, and a rupture had then taken place into the peritoneal cavity.

I have not yet mentioned the fact that when a fœtus penetrates the wall of the Fallopian tube the opening may not be into the peritoneal sac, but into the space between the folds of the broad ligament. In this case blood and other products of absorption would escape into the loose connective tissue, and if the death of the fœtus did not take place the placenta would expand over the adjoining parts within the ligament.

When a fœtation develops in this situation its connections may be compared with those of an ovarian tumour burrowing in the same direction, that is to say, it tends to raise up the peritoneum of the pelvic floor, and with it the uterus, sigmoid flexure, cæcum, and even the lower end of the mesentery. It is said that a secondary rupture may occur into the peritoneal cavity, *i.e.*, that the fœtus may first escape from the Fallopian tube into the connective tissue of the broad ligament, and from there may pass into the sac of the serous membrane. But in the later stages of development of an extrauterine fœtation, owing to the matting of the tissues that takes place, it is very difficult to trace the course which has been followed by a gestation sac, and it seems to me that in most of the cases in which the fœtus rises up and is found amongst the intestines, the mode of origin is that described by Dr. J. W. Taylor, namely, by rupture of the tube into the peritoneal sac, and by development of the fœtus in its own proper membranes or in the amnion alone. This seems at least to be the best explanation of all those cases in which the placenta is obviously outside the broad ligament, such as the case[1] in which Dr. Taylor first recognised the amnion covering the fœtus, although the latter appeared, under a less careful examination, to be free in the peritoneal cavity.

In that case the placenta was attached to omentum, intestine and broad ligament, in such a way that it was possible to tie and divide all its connections without loss of blood.

When an extrauterine gestation goes to term the fœtus must die. If septic conditions do not arise the amniotic fluid is then absorbed and the fœtus itself may also be removed by

[1] *Obstet. Soc. Trans.*, vol. xxxix., p. 178.

absorption, with the exception of the bones. Or a lithopædion may form, the soft parts becoming transformed into a tissue which persists, retaining more or less of its original shape. Dr. W. N. Haultain[1] has collected nine cases, and published a tenth, in which a fœtus thus preserved had been retained for over forty years, and there is another case in the Transactions of the Obstetrical Society,[2] in which a "perfect fœtus" was retained for forty-three years.

The conditions following a septic infection are too numerous to discuss in a short paper, but they are those of a large abscess, the cause of which cannot readily be ascertained Sometimes the fœtus remains aseptic for a time after its death, and then ulcerates into some hollow viscus, or it may escape very soon. The fœtus may be completely discharged in this way, and the patient after a severe illness may be effectually cured. This result is most likely to take place if the opening is into the rectum or vagina. When it takes place into the small intestine the chances of recovery are remote.

Diagnosis.

In the diagnosis of an extrauterine fœtation it is important to attend, first, to the history of the patient, and second, to the physical conditions. In a large number of the cases that have come under my personal observation it has been possible to make a fairly certain diagnosis from the history alone. Cases have been recorded in which there has been amenorrhœa during the whole course of an extrauterine fœtation, and there has been no suspicion that anything was amiss until after delivery should have taken place. But, as a rule, menstruation is delayed for a week or two, perhaps for a month or two, and then comes on in an irregular way. If a woman who has had the opportunity of becoming pregnant, and whose periods have always been regular, gives such a menstrual history, and if there is nothing else to account for her condition, the development of an extrauterine fœtation should be regarded as at least a possibility.

If, in addition to this, she is seized by a sudden pain in the

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[1] *Jour. of Obstet. and Gynæcol. of the British Empire*, 1904.

[2] Vol. viii., p. 106.

pelvis and symptoms of collapse, the suspicion becomes almost a certainty.

But an extrauterine fœtation may give rise to a severe hæmorrhage before the patient has missed a period An examination at this stage may yield no information, especially if the patient is at all stout. The fœtal sac is not large, and the escape of blood makes the parts so soft that they can hardly be felt. If the blood has escaped into the broad ligament this will be tensely distended, and the uterus will be dragged and pushed upwards and to the healthy side. But if the blood escapes into the peritoneal sac it is very difficult, and sometimes impossible, to detect it by the usual signs of a fluid in the peritoneal space, probably because of its viscid properties.

There may, therefore, be only the symptoms to indicate the condition. They are those of a hæmorrhage, and in their most severe form are characterised by profuse perspirations, rapid pulse, extreme pallor, breathlessness, restlessness and syncope. The patient may be unconscious when first seen, and death has been recorded three hours after the doctor was first consulted.[1] The condition is usually ushered in by severe pain and vomiting. It is obvious that under these conditions a definite diagnosis between a ruptured Fallopian tube and a strangulation or ruptured viscus may be impossible, except by opening the abdomen. In a number of cases the symptoms have come on during the act of defæcation.

Later on when there is a gestation sac that can be felt, or when a clot forms, the physical examination is of importance. In examining a patient who has a swelling that may be caused by an extrauterine fœtation, it is important to remember that the Fallopian tube may be short and fixed down firmly, or long and loosely attached. Hence, exactly as in the case of an ovarian tumour, the mass may be very freely mobile or firmly held down by the broad ligament even before there is any rupture; moreover, it may be close to the uterus or actually in its wall, or it may be quite separate from it. After a hæmorrhage has taken place the parts are apt to be more or less fixed. Even when the blood escapes into the peritoneal space it forms a clot in a very short time, and this

[1] *Obstet. Soc. Trans.*, vol. xv., p. 248.

becomes more or less firmly adherent to neighbouring structures. If it is possible to watch the patient, the presence of a slowly growing mass would favour the view that the condition was an extrauterine fœtation, but it must be remembered that an ovarian or other tumour may also grow at any pace. It is important to note that a hæmorrhage does not necessarily arrest the growth of the ovum.[1]

There is a point that I have not mentioned until now, namely, that a deciduous membrane usually forms in the uterus as a consequence of a pregnancy in the tube, a fact which shows clearly that it is the condition of pregnancy, and not the direct contact of the ovum, that stimulates the formation of the decidua. Sometimes this membrane is never seen. It may be discharged piecemeal, but very often, in the course of the first three months of gestation, it is discharged either as a complete cast of the uterus or in large pieces, and when this takes place it may be supposed that there has been a miscarriage. Hence, a history of a miscarriage occurring after one or two months of amenorrhœa, unless there is reliable evidence that a fœtus has been seen, is an important point for consideration in making a diagnosis. The discharge of a decidua is sometimes coincident with hæmorrhage from a ruptured tube, but this is not necessarily the case.

The diagnosis between an extrauterine and an intrauterine pregnancy is not always easy, but if the pregnancy be outside the womb the fundus uteri may generally be detected adjacent to the gestation sac, and when the position of the uterus is prominent, rhythmic contractions may be observed in it. An extrauterine and an intrauterine gestation may occur together. When the pregnancy has advanced so far that the fœtal parts may be defined, there should be little difficulty. The limbs may be more easily detected if the pregnancy is well up and well forward in the abdomen, less easily if it is held down in the pelvis under the broad ligament, but in the latter case the configuration of the child may be very obvious on vaginal examination. It is often said that movements are more painful when the fœtus is extrauterine.

The presence of milk in the breasts offers a strong, but not an absolute, indication that the patient is pregnant.

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[1] Playfair, *Obstet. Soc. Trans.*, vol. xxx., p. 488.

The age of the patient offers no aid to diagnosis, except that she must be within the child-bearing period. The previous health also affords no assistance in diagnosis. It has been said that an extrauterine fœtation is more likely to occur after a long period of sterility in a woman who has been pregnant, but there are numerous cases in which this condition has occurred in healthy young women immediately after marriage.

When a patient's menstruation has long been irregular from the presence of an endometritis or a fibroma, the history may afford little assistance to the formation of a diagnosis, and of course the passage of a deciduous membrane may be described as habitual in a few women, and may certainly occur without an extrauterine fœtation being present.

Treatment.

If a very profuse hæmorrhage is diagnosed there should be no delay in operating, and unless the patient is really moribund, the more serious her condition is, the more urgent is the necessity for interference. Saline solutions should be injected into a vein, into connective tissue or into the rectum, the abdomen should be opened, and the bleeding vessels must be secured. This is generally, and probably most quickly, done by removing the ovary and tube. The operation in the early stages is often quite a simple one, if promptly performed.

When there are signs of hæmorrhage from an extrauterine fœtation, but the symptoms are not urgent, the patient should be kept absolutely quiet in bed, not too warm, and she should not be allowed to take warm food of any kind. She should not be allowed to get out of bed for any purpose whatever, and arrangements for an *immediate* operation, if further evidence of hæmorrhage occurs, should be made.

I think that if signs of a second loss of blood arise the abdomen should be opened and the affected parts should be removed. If there is no fresh sign, the patient should be kept completely at rest for at least four weeks, and if, during that time, a growing mass is found in the pelvis, operative treatment should be resorted to. If a mass remains without any change of size a further period of rest under observation should be insisted on, or the parts should be removed by

abdominal section. A considerable proportion of cases will get well without surgical interference, but the nicest judgment and very great watchfulness are necessary in the management of such cases, for there is no guide to the severity of a future hæmorrhage, and there is no doubt that delay may give opportunity for a serious loss of blood. It is therefore of the utmost importance that if an immediate operation is not performed, all the necessary appliances for prompt surgical interference should be kept ready, in case they may be needed; and it must be arranged that the attendance of a surgeon can be promptly obtained. If these conditions cannot be fulfilled it is safer and wiser to operate at once.

When the pregnancy is more advanced, and indeed, in all cases without exception, it seems to me that it is best to operate without delay, if it is believed that a fœtus, developing outside the uterus, is alive.

This course entails operating on those cases in which a lithopædion might form, and on those in which, if no operation is performed, all the tissues become absorbed except the bones, which may get tucked away in some corner of the abdomen where they are harmless. But when we have to advise a patient with a living fœtus outside her uterus, we cannot offer her any real prospect that such happy terminations to her condition are probable.

If the fœtus dies when the pregnancy is fairly advanced, and there are no urgent symptoms, the question of operating may be open to discussion, but unless the fœtation has been in a quiescent condition for a considerable time, the chances of a development of septic mischief are so great that it seems to me wiser to attempt to get rid of the fœtus and of the gestation sac, or to remove the former and drain the latter.

It is sometimes said that we should deliberately wait until the fœtus dies and pus forms in order to avoid danger from hæmorrhage. Those who recommend this course must have had a much more favourable experience of operations after the death of a fœtus of advanced development than has fallen to my lot. Moreover, it seems to me that, on theoretic grounds and also from a study of the literature of the subject, to delay operation is not the wiser course.

The chief danger of an operation, when a fœtus of advanced

development is alive, is from hæmorrhage. If the fœtus is situated well up amongst the intestines, and all its membranes except the amnion are absent, and if the placenta is outside the broad ligament, the operation may be quite easy and the placenta may be removable without loss of blood. But if the placenta be sessile, it grows larger and more full of blood as time passes. Hence up to the death of the placenta this danger from hæmorrhage increases. If the fœtus dies in such a case (that is when the fœtus is covered by amnion alone and lies amongst the intestines), and if suppuration takes place, a large abscess in intimate association with numerous coils of small intestine is formed. This is a most dangerous condition and may result in the formation of one or more intestinal fistulæ.

If the fœtus is in a firm capsule and becomes septic, the infection may be confined to its sac, and the risks of an operation after pus has formed may not be great; but in such a case it would be possible to firmly plug the cavity, and therefore the dangers of hæmorrhage would be less if the operation were performed early.

Moreover, the question arises as to how long the danger from hæmorrhage continues after the death of the fœtus. Dr. J. W. Taylor, in one case,[1] removed a full-time, living child and closed the abdomen, leaving the placenta inside. The placenta was attached "all over the pelvis."

Twelve days later the abdomen was reopened on account of febrile symptoms. The placenta had begun to putrefy and had an offensive odour. It was rapidly separated, but the hæmorrhage was immediately profuse and alarming.

I have recorded a case[2] in which the placenta remained alive and caused profuse hæmorrhage at intervals during twenty-three days after the fœtus was removed. The placenta then died in consequence of a determined attempt to extract it, which had to be given up on account of bleeding. After this, however, there was no more hæmorrhage, although the whole placenta had to be peeled off bit by bit.

Dr. Champneys, quoting Litzman, said that furious bleeding had occurred from the placental site four months after the

[1] *Obst. Soc. Trans.*, vol. xxxiii., p. 115.
[2] *Obst. Soc. Trans.*, vol. xlv., p. 382.

death of the child.[1] It is therefore by no means certain that the death of the child will give immunity from the risks of hæmorrhage.

It seems to me that the chances are strong that, as pregnancy advances, less favourable conditions are likely to obtain; and if an operation is performed at once and proves very dangerous on account of the bowel being attached to the placenta, or on account of hæmorrhage, in such a case the conditions would be very apt to become more serious by delay.

On the other hand, conditions offering relief by a fairly easy operation may also become very serious indeed as time passes.

To sum up, the amount of risk from hæmorrhage may be slight; this risk is not avoided with absolute certainty by waiting for the death of the child, and in my opinion the dangers of sepsis can hardly be considered a lesser evil. Hence it does not appear that there are sufficient grounds for setting aside in these cases the great surgical principle that, whenever it is possible, septic infection should be prevented.

There is no more hopeless operation in surgery than that for an extrauterine fœtation when the sac has become putrid and a fistulous communication has formed between it and the small intestine. As a rule a resection of intestine is not possible, because the putrid sac has contracted numerous adhesions of a very intimate nature to other coils of gut, and, indeed, there may be more than one fistula.

I have seen several cases of this kind, although it has been my good fortune that they occurred under the care of other men, for such cases are as nearly as possible quite hopeless.

When the abdomen is opened, if a gestation sac of any thickness is very adherent it should be drained, and sometimes it may be best approached from the vagina. A living placenta, unless its blood supply can be controlled, is best left to separate by natural processes, provision for its exit being made.

There are, however, few surgical conditions more variable than those produced by an extrauterine fœtation, and I fear it is quite certain that many of the cases in which the fœtus

[1] *Obst. Soc. Trans.*, vol. xxx., p. 486.

has advanced to the middle and later stages of its development, will prove fatal whatever treatment may be adopted. This is one very strong reason for operating whenever the condition is diagnosed if the fœtus is believed to be alive. Operative treatment should be almost free from a death-rate if the patient is seen and treated sufficiently early.

There is one other point of some importance which I do not remember to have seen noted, and to which, therefore, I would refer, namely, that if profuse hæmorrhage arises from the affected parts, as a rule most of it comes from the broad ligament, so that by securing the ovarian and uterine arteries the chief sources of bleeding may be stopped. I think that in some cases removal of the uterus might be necessary to effect this purpose.

Oozing from adherent surfaces, even if free, may be neglected with comparative safety, especially if the adhesions are recent.

ON BOLDNESS IN THE TREATMENT OF SOME PHASES OF PNEUMONIA.

By Alexander Morison, M.D., F.R.C.P.

In 1903 I had the honour of reading a paper before this Society on boldness in the treatment of heart disease. A portion of the present paper may be regarded as a corollary to some of the positions maintained in the former communication. So much of this paper might, indeed, have been entitled, "On the Management of the Heart in Pneumonia."

Among the leaders in the revolt against indiscriminate blood-letting in pneumonia about the middle of the nineteenth century, was Dr. George Balfour, of Edinburgh, a notable authority in his day on the nature and treatment of heart disease. He was, however, apparently so swayed by his conclusions as regards the injuriousness of venesection in inflammation of the lungs (Hæmatophobia, *Edinburgh Medical Journal*, vol. iv., p. 214, *et. seq.*, 1858-9), that in his excellent lectures on diseases of the heart he makes no mention of the utility of blood-letting in affections of that organ.

In my former paper I endeavoured to show that in some

phases of cardiac failure venesection was of great value, in conjunction with other measures vigorously pushed, and in due course I shall contend that there is also a place for the employment of this measure in some phases of pneumonia in which death is threatened by cardiac failure.

In order, however, to justify in advance the title given to this paper, and to protect myself against the possible accusation of being a sort of therapeutic Ghazi, running amok against dangerous complications of disease, I shall state now that boldness in the employment of any measure should presuppose some positive acquaintance with the principles warranting energetic action. The bold use of an empirical remedy can only be justified by a record of unvarying success, or by a practical innocuousness of the drug or measure, even when it fails to accomplish its object. I shall, therefore, chiefly deal in this paper with boldness in the treatment of pneumonia on those principles of which we may assert, with some show of reason, that we have an approximately adequate knowledge. It was my design to have added a few illustrative cases, but the limits of time compel me to forego this clinical chronicle, and I must ask you to assume that the positions I shall maintain are based upon actual experience, and upon my interpretation of the results of the employment of those measures which have been pushed with boldness in the treatment of this disease.

What, then, are those lines on which we are justified in acting with boldness in this matter?

The bacteriological causation of pneumonia is of too recent date, and our knowledge of the causes and consequences of inflammation thus originating too limited, to allow of dogmatism in this sphere; while it is common knowledge that the abortion or removal of pneumonic conditions by serum therapy is not yet possible, although its tentative use under certain circumstances is quite permissible. The future, and perhaps a not distant future, probably holds agencies of this class which will enable us to treat pneumonia with as much confidence as diphtheria, but that time is not yet, and our therapeutic efforts on these lines are purely experimental at present.

If, however, we cannot now so scientifically cure our patient as we hope one day to be in a position to do, we may at times

actively assist in keeping him alive and in affording him time to cure himself. In the following remarks I do not pretend to do more than to deal with matters of common knowledge, and if I refer to some facts which are very familiar I must ask your forbearance, as I shall only do so in the development of a line of thought which, I hope, may provoke fruitful discussion by members of the Society.

The signs of a palpable inflammation, as determined by long observation, are pain, heat, redness or congestion—superficial or deep—and swelling. The issue of these conditions is in resolution, or in one or another form of destruction of tissue, over which the surgeon has, in some cases more, and in others less, power of beneficent action.

The cardinal signs of inflammation of the lungs — of pneumonia—are fever, accelerated cardiac and respiratory action, and local changes of pulmonary texture by engorgement, swelling and consolidation. Pain, although also a minor state in visceral inflammation, does not play so prominent a *rôle* as in the inflammation of parts more fully innervated by the somatic nerves. The issue of these signs of pulmonary inflammation is in defervescence, cardiac and respiratory ease or retardation, and in resolution; or in the delay, postponement, or prevention of the crisis of a terminable pneumococcal inflammation, by an engrafted streptococcal or other infection of indefinite course, leaving too frequently in its train death from cardiac failure; or the supervention of more chronic local destructive processes, over which the physician and surgeon have, sometimes more, sometimes less, sometimes little, and sometimes no power of beneficent action.

If the cardinal signs of pneumonia to which I have referred be moderate in degree, and their unfavourable possible terminations not clinically declared or prognostigable, there will, of course, be no necessity for any boldness in the means used to antagonise the various evidences of the inflammation. The less a pneumonia progressing towards a favourable issue is interfered with the better for the life of the patient, and the better also for the reputation of the physician. By all means let the patient have his mild diaphoretics, assist the evacuation, if need be, of his *primæ viæ*, rest his body and, if possible, his mind, give him food and drink conducive to the susten-

ance of his strength and the elaboration of the protective agencies in his own body. If he be sleepless, let him have a suitable hypnotic. To do all this is important; it *does* help the patient, and the physician, although not active, is on the alert, or should be, for graver contingencies. It may be the good fortune of both that nothing more is necessary. Statistics, which we know are not to be prized too highly, show that with every so-called system of treatment patients will in many cases recover. This is true of systems whose keynote is to do little or nothing, and also of systems which do not err on the side of inactivity.

The conclusions as to the effects of treatment in the days prior to the time when accurate physical diagnosis became possible are not to be trusted. Some who survived much blood-letting in the past, without doubt, had not the local conditions which were assumed to be present when that measure was put in practice. The favourable statistics of the inactive school of a more recent period merely prove that a lung inflammation, like an inflammation anywhere else, will resolve and issue in recovery in many cases, if the patient be not killed by too heroic and altogether unnecessary attempts at rescue from a dissolution, equally unnecessarily assumed to be imminent. The conditions in these cases remain within the compass of the recuperative powers of the patient as a whole, and of his individual organs, to withstand the onslaught of the disease. But, on the other hand, there may be a threatening urgency in the degree in which the cardinal signs or effects of the disease manifest themselves, which leaves no place for inactivity—in which inactivity, if it be the attitude assumed, cannot be regarded as masterly, but may be highly culpable—circumstances in which the reduction, if possible, of the threatening signs, to a degree controllable by the inherent powers of the patient, must be sought by the bold use of agents or measures directed on lines or principles of which we ought, in this twentieth century, to possess a comparatively adequate knowledge.

The phenomena usually presented at the necropsy of a patient of average vitality who dies of pneumonia are these: The affected portions of one or both lungs show red or grey, or both red and grey, hepatisation, with more or less congestion of such portions of the organs as are not already

involved in the consolidative process. The heart contains coagulum (it may be partially decolourised), especially in the dextral chambers and in the larger branches of the pulmonary artery. The left auricle also may contain a considerable amount of coagulum, but the left ventricle is usually contracted and empty, or only holds a little agonal clot. The other organs exhibit more or less passive congestion. These are the evidences of an increasing difficulty in the blood reaching the left ventricle for systemic distribution. They are the phenomena of asphyxia and cardiac failure. To what factor or factors are they chiefly due?

Is it that engorgement and consolidation of the pulmonary textures offer a serious impediment to a considerable quantity of the venous blood being propelled through the pulmonic circuit? I think not.

When a crisis occurs the pulse rate falls, and the dyspnœa exhibited by the patient a few hours previously also in great measure, and as a rule, subsides. There is at this time, and under these circumstances, no material alteration in the degree of general pulmonary blockage, vascular and other. The latter, therefore, cannot be the essential cause of the dyspnœic and asphyxiant phenomena is pneumonia.

To what, then, are these due? Chiefly, I believe, to the *symptomatic tachycardia* exhibited in such cases; for with the crisis these signs subside, and the chambers of the heart both fill and empty more completely.

While expressing this opinion, I do not wish to minimise the importance of the depressing effect of the toxins of the pneumonic process on the circulatory and respiratory functions, but we know that in non-toxic and non-febrile states tachycardia is alone sufficient to induce cardiac failure, with retrogressive dilatation of the chambers of the heart, and we may, I think, reasonably assume that the symptomatic tachycardia referred to also plays an important *rôle* in this respect in pneumonia.

If this be granted, of what is this tachycardia symptomatic? What is its proximate cause? Doubtless in greatest measure the pyrexia associated with the inflammatory process, whatever the essential cause or causes of the latter.

The reduction of fever, therefore, and the conservation and, if need be, relief of the overworked heart, are the chief points

demanding attention in the management of the mechanics of the pneumonic process when this threatens the life of the patient; while the maintenance of a proper quantity and quality of blood through the channel of nutrients is all we can rationally do at present to enable the patient to outlive the essential causes of the disease, although, as I have already stated, this does not exclude the use, for example, of anti-streptococcic serum, if such an engrafted agency be found to be active in any particular case. These, then, being the objects to be kept in view, how is the attempt to attain them to be made?

(1) In the first place, how is the fever attending the pneumonic process to be kept within bounds, or the attempt made to keep it within bounds?

We may, of course, use various antipyretics of a chemical kind, which will temporarily reduce fever by inducing perspiration, but the more powerful agents of this class cannot with benefit be continuously employed for any length of time, and milder diaphoretics are, under the circumstances, of little value as antipyretics. The direct physical agency of cold, therefore, seems best calculated to counteract the effects of abnormal heat. In one way or another water in various forms has been employed for the reduction of fever, and in the treatment of pneumonia Dr. D. B. Lees has drawn special attention to the value of the local application of ice to the neighbourhood of the inflammation (*Lancet*, vol. ii., p. 890, 1889).

In my own experience I have found such an application of ice to the surface of the body somewhat trying to many patients, while children frequently become very restless under its employment in this manner. Moreover, as I shall presently maintain, our object in using ice appears to me to be indirect rather than direct, and its application near the seat of disease therefore unnecessary. I have consequently made a practice of applying the ice-bag to the head rather than to the surface of the thorax. Thus used, it is comparatively easily tolerated, and appears in some cases to induce sleep by reducing the fever, and probably also by the direct transmission of cold by the sensory nerves to the deeper nervous centres. In this situation it may be kept more or less continuously applied, so long as the temperature is above 101° F.

Below that point, in cases with good reaction, the febrile movement is unimportant and cold depressant.

This statement cannot, however, be made without qualification. A higher temperature may in many cases be borne with impunity, and on theoretical bacteriological grounds, in the opinion of some, with advantage, as tending to shorten the life of the pneumococcus. But it must be borne in mind that an apparently robust individual may be the subject of an unsuspected fatty degeneration of the heart, or of some other form of cardiac disability, and that if we submit him to the uncurbed riot of a pyrexial tachycardia we may shorten *his* life before we seriously inconvenience the pneumococcus. Even, therefore, by risking the theoretical extension of the latter, I maintain that it is wiser to endeavour to reduce fever and its consequent tachycardia. In practice it will be found that this is a difficult matter, but in my opinion it can best be accomplished by the measure I have recommended.

As, moreover, essentially visceral inflammations are frequently attended with little pain, unless neighbouring structures, innervated by the somatic nerves, are simultaneously affected, the local use of ice does not appear to be indicated, while the pain of pleurisy is best and most promply relieved by the application of a few leeches. Regarding ice, as I do, as an antipyretic in pneumonia, and not as a local antiphlogistic, its application to the head appears to answer every purpose it is capable of effecting. I do not, however, deny that thus used it may, by reducing the respiration and pulse rate, directly tend to conserve the irritability of the centres regulating those functions. In apyretic tachycardia of neuromuscular origin it has, applied thus, appeared to me to be of use in steadying the action of the heart and reducing its rate, and it probably acts thus, also, in a measure, under the circumstances we are considering.

(2) The Conservation and Relief of the Heart.

In considering this point, we have to bear in mind the neuro-muscular, hæmic and mechanical factors underlying cardiac action.

Remembering the anatomical condition of the heart found after death from pneumonia, to which I have already referred, the general tendency to repletion of the right heart and deple-

tion of the left, as in all tachycardiac and asphyxiant conditions, the maintenance of the irritability of the organ and the relief of the dextral chambers, are the chief objects of the physician. To maintain the irritability of the heart the hypodermic injection of strychnine pushed in proportion to the debility of the patient is the most useful measure. Provided the patient manifest the physiological antidotal condition to the over-action of the drug, namely, exhaustion, a carefully watched patient can tolerate repeated and considerable doses of strychnine without injury. I have, under these circumstances, given 8 to 10 minims of the liq. strychninæ hypodermically in pneumonia every four hours for days with benefit. Digitalis and strophanthus I rarely now use in pneumonia, as the action of these drugs on a comparatively empty left heart tends, in my opinion, rather to retard than promote the circulation.

Useful as *opium* is in inflammation of the heart, when also its retardation of respiratory action is noteworthy and desirable, the use of this drug in pulmonary inflammation is not so suitable. With a fairly full pulse and limited implication of lung, opium, as a hypnotic, is at times serviceable in pneumonia in the adult, but I confess that I have rarely used it, even under these circumstances, without some apprehension, in this disease.

On the other hand, when the lung is burdened with much bronchial or alveolar material in a softening condition and the patient threatens to drown in his own secretion, the bold use of turpentine internally may be of much value.

Whether turpentine has any directly antiseptic value under these circumstances I cannot positively affirm, but I have known recovery to take place under its use in broncho-pneumonia of a prolonged and septic type, when the condition of the patient appeared to be quite desperate, and after the appearance of superficial purpura. That it renders the blocked air passages more pervious is, I think, certain.

(3) The Relief of the Heart by Blood-letting.

The last but not the least important point to which I shall refer in considering the bolder treatment of some phases of pneumonia is the question of blood-letting.

In the days of heroic venesection, the object with which this measure was employed was the prevention or limitation of pulmonary engorgement. Inflammation was regarded as a purely mechanical determination of blood to a part, which might be prevented by opening a collateral tap in the circulation regarded as a hydraulic machine. Discouraged by the high rate of mortality in the disease under ordinary venesection, some advocated a greater boldness in blood-letting, and bled, *coup sur coup*, repeatedly and largely, in the endeavour to effect by this means what a milder bloodshed failed to do. But by this "jugulant" method, as it was called, our predecessors also largely failed, although statistics occasionally appeared to support each fresh departure. The general sense, however, was one of failure, and, like the pause after a great war, there was for a time so complete a truce to blood-letting that generations of students grew up and were dispersed into practice with nothing less than a horror of blood-letting in every form and under all circumstances. The public naturally, in time, took the same view, and he is a bold man who even to-day calmly proposes venesection in private practice in many cases, even although all the indications point to its necessity. I recently met a *confrère* in consultation, who told me that he had sent for me simply because he dared not himself bleed an urgently orthopnœic patient with broncho-pneumonia. We together relieved the patient of twelve ounces of blood from the arm at once, and with immediate benefit.

From what we now know of the nature of the pneumonic process we can understand why the bold preventive methods failed, as methods preventive of the progressive consolidation of a pneumonic lung, whether by bleeding or by ice, or by any other means at present known to us, are bound to fail. The particular attack of pneumonia with which we have to deal may be severe or may be mild, but being micrococcal in origin, the severity and duration of symptoms will depend upon the nature and virulence of the infective agent or agents concerned, although, no doubt, they are also influenced by the state of the inherent powers of resistance of the patient.

In the case of limited and easily accessible inflammations, such as otitis and pleuritis, associated with pain, a local loss of blood may, we know, by relieving tension remove pain

and reduce inflammation. But the argument from these facts to the more general effect of blood-letting on visceral inflammation has not been found in practice to hold good. Boldness, therefore, in endeavouring to oust the infective agent by venesection, or to limit the pulmonary engorgement, is irrational. That will only be possible when we learn how to kill or starve the pneumococcus and associated organisms *in situ*, and in the general circulation, by some bactericidal or antitoxic serum.

The object of venesection, like that of the application of ice, as I conceive it, is not to prevent inflammation of the lung, but to maintain the effective action of the heart. It is directed against cardiac failure, not pulmonary engorgement, and it is only when cardiac failure is threatened that venesection is admissible. As, moreover, such failure may occur more than once in the course of the same case, the same heart may have to be relieved by venesection on more than one occasion.

The indications for the employment of venesection under these circumstances are—urgency in dyspnœa, with more or less duskiness or cyanosis of countenance, usually accompanied with fulness of the superficial veins, and diminution in the size of the radial pulse.

The precise delimitation of the area of cardiac dulness under these circumstances is not always an easy matter. The intervention of the sounding board of the sternum, together with the accelerated rate of respiration, and the presence of adventitious sounds in the lungs themselves, make it difficult at times to determine with exactitude the extent to which the dextral chambers of the heart are dilated. Fortunately, such accuracy of physical diagnosis is not necessary to guide us, for the more general effects already mentioned, produced by cardiac conditions, are sufficient indications of the state of the heart. It is probable that one reason why the large blood-lettings of the past were not even more fatal than they were, was due to the fact that venesection was practised early in the disease, when the patient's strength was frequently fairly good. Now that we regard the justification of blood-letting in pneumonia to be in the presence of signs of cardiac failure, whether these occur early or late, the scope of venesection in such cases is, naturally, much and properly restricted. Of

blood-letting late in a protracted case I have no personal experience. At this stage the diminished absorption of food from the digestive tract is, in itself, a mode of depletion *a tergo*, and any additional blood-letting appears to be inadvisable. But, even under these circumstances, if the retrogressive stasis in the circulation appears to be a dominant factor in the situation, it is conceivable that venesection to a moderate amount may be permissible.

As regards the *amount* of blood to be withdrawn to procure relief, eight to twelve ounces, in presence of the signs of venous turgidity to which I have referred, may suffice, and the more rapidly they are withdrawn the greater will the effect be. But the quantity abstracted must be regulated by the observation of the effects of the measure upon each case, and the average quantities mentioned exceeded or diminished accordingly. In the case of children, a few leeches applied to the side, or in the right hypochondrium, may be sufficient.

A good deal of controversy of a theoretical nature has been raised as to whether any, or if so only a temporary, effect is produced upon the embarrassed circulation by blood-letting under these circumstances.

That an effect is produced cannot, I think, be reasonably questioned. That it is only temporary may be admitted, *provided*, we also admit, that the more effective action of the heart which may ensue is maintained by other means, although initiated by blood-letting. Nor is anything except *such* temporary relief expected, desired, or necessary, as a result of venesection, to justify its employment. Relief is experienced by the patient and observed by the physician, and such temporary relief of distensive tension, coupled, as it should be, with the bold use of strychnine hypodermically administered, may be all that is necessary to restore force to the pulse and sufficient tone to the dilating chambers of the heart, to gain for the patient that reprieve from death which may make all the difference between the ultimate victory or defeat of his inherent forces over the processes of the disease.

There are other questions in the treatment of pneumonia, such as the value of oxygen gas, the use of alcohol and the mental phenomena in some cases, which present points of interest. But while anything except a careful use of alcohol

may be detrimental, I have, I think, sufficiently indicated the direction in which we have to regain, I would suggest, under more enlightened circumstances, a measure of that boldness in the treatment of pneumonia which was justly discredited when rashness was aggravated by ignorance and the remedy misapplied. Thus was brought about that revulsion in methods which engendered the tamely expectant attitude in the treatment of pneumonia so prevalent even now, which looks askance at any active interference with the course of the disease, and even lauds the fever as a process likely to limit the ravages of the pneumococcus, which we now know may be associated with other and more deadly organisms, which may flourish long in the febrile state.

In conclusion, I offer an apology for so frequent an allusion to my own experience and conclusions, but general principles appeal most to us when we have personally reduced them to practice. Moreover, the assumption of personal responsibility for statements made, provokes both a more vigorous attack and defence in discussion.

THE CLINICAL CAUSES OF CANCER OF THE BREAST.

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Before dealing with the special subject of this paper, I venture to make a few remarks on the general subject of the etiology of cancer.

Our greatest need at the present time is, I conceive, not the putting forward of new theories, however brilliant and startling they may be, but the collection of as many clinical facts as possible, and the patient carrying on of experimental work. The pathologist and practical surgeon must work hand in hand, and the work of the one must not be divorced from that of the other.

At the onset I would ask you to accept what I shall try to prove later on, viz., *that not only one but many clinical causes of cancer exist.* (I here use the word "cancer" in a broad sense, and include in it both the epitheliomata and the carcinomata.)

It is the non-recognition of this fact which has hitherto confined our enquiries to more or less stereotyped lines, and limited our conceptions of its etiology to a most harmful degree. *A priori*, we surely are not right in expecting a *single* cause to exist which is capable of explaining the origin of cancer throughout the body, seeing that the different parts of the body are exposed to the most diverse kinds of influences. Let us take two regions where cancer is common, the tongue and the cervix of the uterus, for example. Few would deny that syphilis, spirit drinking and smoking are, to say the least, powerful factors in producing cancer in the former region, whereas they are not regarded as bearing any relation to the origin of the growth in the latter locality. Again, an organ such as the breast is subject to morbid influences very different from that of an organ like the stomach. The former occupies a prominent position, and is naturally more exposed to injuries than the latter, and we shall see later on that in so large a percentage of cases of cancer of the breast is there a definite history of injury, that we are compelled to admit this as being a common cause of cancer in this region. In the case of the stomach, however, such a history is usually wanting; hence traumatism cannot in this case be regarded as a common cause of cancer.

Clinically, we know that cancer may follow many different kinds of injury and irritation; soot and paraffin, for example. Mr. Jonathan Hutchinson has called attention to the fact that arsenic may also be a factor. I have had under my care (*a*) a man who had an extensive epithelioma in the right thigh, which developed as a result of an accidental burn, caused by the upsetting of some methylated spirit and white-heart varnish (composed of shellac, resin and gum), which caught fire; (*b*) a man who had an epithelioma of the thumb, which developed as a result of his constantly working with sand and horse-dung; (*c*) a woman, with a large epithelioma of the labia, caused by prolonged pressure of the child's head during one of her confinements; (*d*) a woman who had a cancer of the cardiac end of the stomach, caused by her swallowing a set of false teeth many years ago. Recently Mr. Ernest Neve[1], F.R.C.S., Surgeon to the Kashmir Mission

[1] *Indian Medical Gazette*, vol. xxxv., No. 3, March, 1900.

Hospital, has called attention to the influence of heat in producing what is known as kangri-burn cancer of the thigh and abdomen. He says: "The cause of this is not far to seek. During the severe winters, and, indeed, for a great part of the year, every Kashmiri man, woman or child carries a portable charcoal brazier under the loose gown which constitutes his or her only garment. [I pass round a model of the brazier which Mr. Neve has sent home to me]. When walking this hangs against the abdomen, when seated it is placed on the ground between the thighs. Slight burns frequently occur, and in very many people there is mottling of the skin in the exposed parts. The frequency of epithelioma may be judged by the fact that twenty cases of this kind were operated upon during June and July only." Mr. Neve was kind enough to send me several specimens of these growths, which were examined by Dr. A. Paine, Pathologist to the Cancer Hospital, who found them, as Mr. Neve had done, to be genuine squamous-celled epitheliomata. [I here pass round a photo of a kangri-burn cancer.] Many more cases, showing how various forms of irritation and injury result in cancer, might be quoted. But, it is argued, these different kinds of irritation and injury only act as predisposing causes, the essential cause is the entrance of a micro-organism, the life-history of which once known, the cause of cancer is known. In support of this theory it is urged that certain cell inclusions, found in cases of carcinoma, are parasitic in nature. Plimmer stated that out of 1,278 fresh malignant tumours he examined he has found them in 1,138 cases. I do not intend here to discuss the much vexed question of the parasitic origin of cancer. There are many arguments in favour of it, and many against it, but I maintain that in the present state of our knowledge we have no right to regard an organism, the very existence of which is to some extent hypothetical, as *the* sole cause of cancer.

Moreover, and this is the special point on which I would lay stress, even if we accept the parasitic origin of cancer, we must remember that in studying its etiology there is another factor of equal, and to my mind infinitely greater, importance to be taken into account, viz., the resisting power of the tissues; it is this factor which determines whether a given micro-organism will live or die. In a most interesting address

delivered at St. George's Hospital, entitled the "Seed and the Soil," and reported in the *Lancet*, May 10, 1902, Dr. W. Howship Dickinson calls attention to this point. When discussing the distribution of plants within the vegetable kingdom, he remarks: "But the seed may be indiscriminately and widely spread, within certain wide boundaries it may often be said to be ubiquitous, so that the whole question of distribution turns, not upon the seed, but upon the soil; not upon the germ, but its reception." In dealing with the predisposing causes of tuberculosis or phthisis, he says: "The predisposing causes may be more important than the exciting cause." . . . . "The seed will fructify where it is satisfied with its entertainment, and perish where it is not." These remarks upon the soil apply with just as much, and perhaps even greater, force in the case of cancer. Surely we have just as much right to regard the factors which depress or weaken the tissues as causes of cancer, as the entrance of a micro-organism, the very existence of which is at the present time doubtful. In any case, whether we admit the parasitic origin of cancer or not, a careful consideration of the above facts will, I think, convince us of the urgent necessity of carefully studying all those conditions which, by lessening the resisting power, or depressing the vitality of soil of the body, *may* be sufficient of themselves, *and quite independently of the entrance of micro-organisms*, to determine the onset of cancer. In the light of our present knowledge, we have every right to look upon such conditions as causes, and as we know there are many such conditions, we are logically bound to admit that from a clinical point of view, at any rate, there are many causes of cancer.

Seeing, therefore, that the soil in different parts of the body is subject to many kinds of influences, which vary according to the situation, it follows that if the etiology of cancer is to be scientifically determined, *each region of the body where cancer develops must be studied separately*, each region must have its own special chart of enquiries, and we must be prepared to find that the causes producing cancer in the one region are not necessarily identical with those producing it in others. The sooner this fundamental fact is recognised the sooner will the scales of hazy misconception and obsolete ideas fall from our eyes, and we shall then realise how limited is the view which would assign all cases of cancer to a single cause.

As to the necessity of keeping our minds open to the possibility of there being several causes of cancer, even in an individual case, I can best illustrate my meaning by a reference to Case No. 32. This is an instance of a married woman, aged 50, who has cancer of the left breast. There is a strong family history of cancer, the patient's mother, sister and brother all dying from it. There is a history of severe injury to the left breast shortly before the growth made its appearance. There is also a history of residence for twenty-eight years in a house that was constantly being flooded from the river. The patient, moreover, nursed her mother and sister, both of whom, as mentioned above, died of cancer. To which of these are we to assign the cause of cancer in this case? According to our particular bias we might attribute it either to (1) an hereditary tendency, (2) to the injury, (3) to residence in a damp house, or (4) to a possible infection. But clearly we have no right to select one of these factors, and call it *the* cause, and neglect the others. Yet in the laborious compilation of statistics, erroneous conclusions of this sort have been formed, simply because the subject has been attacked with reference to one particular theory, or from one single point of view.

Turning now to the clinical causes of cancer of the breast, which forms the subject of this evening's paper, I may mention that the results and conclusions formed are based upon an analysis of 100 cases, the histories of which I have carefully taken myself during the past two years, and all of which have been admitted into the Cancer Hospital. The special points I wish to discuss to-night are the following: (1) Age; (2) state, single or married; (3) *family history*, especially of cancer and consumption; (5) *lactation*, presence or absence of, duration of, manner in which it has been performed, use of applications; (6) previous diseases of the breasts; (7) injury; (8) corsets, comfortable or otherwise; (9) worry and anxiety; (10) residences, situation of, near a river, whether dry or damp, climate, drainage, (11) miscellaneous, general health, occupation, possibility of infection, cancer-houses, &c.

I may mention that in every case (except in a few where the disease was too far advanced for operation, or where a pathological report could not be obtained, a microscopical

examination was made, and the diagnosis of cancer confirmed. Consequently, all the 100 cases mentioned in this paper are genuine cases of cancer.

Results and Conclusions.

Age.—As far as it has been possible to estimate, the average age at which carcinoma of the breast commences is 49 years and 2 months. The extreme limits of age at which it appeared were found in this series to be 28 and 71 respectively.

Single or Married.—Eighty-four per cent. were married, 16 per cent. unmarried. *Cancer of the breast appears, therefore, to be more than five times as frequent in the married as in the unmarried.* In four of the eighty-four cases marriage took place early, viz., at 16½, 17½, 17 and 15 years of age respectively. In all these cases except the last the first confinement took place within a year of marriage; in the last case it took place three and a-half years afterwards. I would ask, is it not probable that early pregnancies occurring in such young girls may, by stimulating the mammæ before they are properly developed, prepare the way for the subsequent development of cancer?

Family History.—In 39 per cent. there was a definite history of consumption in some member or members of the family. In 23 per cent. there was a definite history of cancer in some member or members of the family. Of this number, in nine cases, and probably in thirteen, a family history of cancer was combined with that of consumption. As I have only included those cases in which the evidence as to there being consumption or cancer was very strong, and have rejected all cases which could admit of reasonable doubt, it is probable that both these percentages should be somewhat higher.

In about 53 *per cent. of cases, therefore, there is a family history either of consumption or cancer.* With these figures it is interesting to compare those collected by Roger Williams, "Diseases of the Breast with Special Reference to Cancer," (pp. 260-278). This author found a family history of consumption in 55 per cent. of his cases of mammary cancer; a family history of cancer in 24·7 per cent.; a family history of consumption *and* cancer in 13·4 per cent.

Dealing first of all with the question of a family history of consumption, it is evident that before we can draw any sound

deductions we must know the frequency with which a family history of tubercle is found amongst the general community. This is variously given by different authors. W. Soltau Fenwick ("Cancer and other Diseases of the Stomach") writes that, "Among the general community a family history of tubercle exists from 10·8 (Dovey) to 28·5 per cent. (Kuthy)." Taking 19 per cent. as the mean between these two, it is evident from the figures already given that the frequency with which a family history of consumption is found is markedly increased in cases of cancer of the breast. Holden, writing as far back as 1868, concluded that tubercle and cancer were in no way akin, and that a patient with a family history of tubercle was no more predisposed to cancer than a patient who had not such a history. With this conclusion I cannot agree, and as showing there is some relationship between the two I may mention the following case:—

A boy, aged 23, was under my care for lupus, which he had had for eleven years. This had involved the upper lip, both cheeks, and had partially destroyed the alæ of the nose on either side. Treatment by the X-rays was commenced, but after the third application he developed a growth the size of a two-shilling piece in the centre of the upper lip. This grew so rapidly that I had to remove it, with almost the whole of the upper lip. The growth was examined by Dr. Morgan, Pathologist to the Cancer Hospital, and proved to be a typical epithelioma. [I pass round the photograph, which was taken before the operation.] I have little doubt that the cause of the epithelioma, which, occurring in so young a patient and situated in the upper lip, is very unusual, was the *irritation produced by the X-rays in a tubercular subject*. A remarkable feature about this case was the manner in which the lupus decreased as the epithelioma grew.

This and other cases which might be quoted are sufficient to show that cancer and tubercle can co-exist in the same person, though, as in the case just quoted, it is usually found that when the former makes its appearance the activity of the latter subsides. I have sometimes found that in those who have a family history of tubercle cancer of the breast develops in an unusual manner; for instance, instead of commencing as a hard lump, as is usually the case, it may begin as a fluctuating swelling, with some redness of the skin, the physical

signs pointing at first more to abscess than to malignant growth; if the case can be watched, however, the signs of the latter slowly but surely become more apparent.

The main question we have to answer is, are patients with a *family history* of consumption more liable than others to cancer of the breast? To this I answer unreservedly, yes. That is, I consider injuries, errors of lactation and various kinds of irritation, which in healthy women produce little or no harm, are much more apt to produce cancer in those in whom there is a family history of consumption. *In other words, in about* 39 *per cent. of cases I regard the development of cancer of the breast as to some extent the outward and visible manifestation of the tubercular tendency.* This tendency to consumption need not, and does not always, manifest itself in the development of tubercle; it may express itself in terms of cancer, especially when, as is so often the case, the breasts are exposed to the different kinds of "insults" to which I shall presently refer. In reference to this point, Roger Williams pointed out that a large proportion of cancer patients are the surviving members of tubercular families. He states "that no hereditary condition is more favourable to the development of cancer than that which predisposes to and accompanies tubercle."

As we have already seen, in 23 per cent. of cases there is a family history of cancer. Are we to regard this as proving that cancer is hereditary in this percentage of cases? That is, are we to regard cancer of the breast as a disease which is passed down as such? I think not, and for the following reasons. In every single case in which there was a family history of cancer, other factors were also present which probably took some share in the production of the growth. Therefore, we cannot regard a family history of cancer as, *per se, a cause* of cancer of the breast. That a certain tendency to cell proliferation may readily be passed down from one generation to another is, I think, extremely probable. Neve observed that many patients suffering from kangri-burn cancer had well-marked spots and plaques of pigmented and raised epithelium in various parts of their bodies, and epithelial horns were not uncommonly present, showing that there was a special proneness to cell proliferation.

In this connection we must always remember, too, that even in those cases where there is a family history of cancer,

or where the mother herself has had cancer of the breast, the mammary cancer in the case of the daughter may have been due, not so much to her having any particular tendency to cell proliferation, as to the fact that her breasts may be, and in all probability have been, exposed to some kind of injury or irritation, or that lactation has not been carried on in the proper way. There would seem to be no evidence favouring the view that in those cases where a family history of consumption is combined with that of cancer the liability to the latter is in any way increased.

In about 37 per cent. of cases I found nothing in the family history which threw any light on the origin of cancer.

Roger Williams concluded that the mere fact of a woman suckling in no way predisposed her to cancer. With this conclusion I entirely agree, but in endeavouring to trace a relation between cancer of the breast and lactation, the point for us to consider is not whether the function has actually taken place or not, but whether it has been performed in a proper or improper manner. Under the heading of lactation I have therefore subdivided the cases as follows :—

(*a*) *There was over-lactation from one or both breasts on one or more than one occasion in fifty-one cases.*

(*b*) *There was absence of or insufficient lactation on one or more than one occasion from one or both breasts in fifty cases.*

(*c*) *Over-lactation was combined with under-lactation or absence of lactation in thirty instances.* Out of a total of eighty-four women who were married, and of seventy-three who had become pregnant, *in only two cases was suckling carried out in a perfectly normal manner. There was some "error of lactation" in* 71 *per cent.*

Such a large percentage shows, I think, conclusively that errors of lactation must, as suggested by Walshe, play an important part in producing cancer of the breast. There can be no doubt that over-suckling on the one hand, and the refusal to suckle on the other, or the presence of some physical disability, which prevents the proper carrying out of the function, are responsible for a very considerable number of cases of cancer of the breast. It is a very common practice for lactation to be prolonged for a year or eighteen months, or even two years, and this custom is often repeated in each succeeding confinement. Such a constant and prolonged drain upon the system

must permanently damage the secretory cells of the mammæ, and thus prepare the way for the future development of cancer.

The same result may be brought about by the opposite condition—deficiency or absence of lactation—but by a somewhat different process.

I am not now considering those cases where there is deficient secretion of milk, or where the milk is poor in quality, but only those where, though a proper amount is secreted, it cannot be got rid of in the natural way.

Now, it is a well-known physiological law that for secretory cells to maintain a state of health it is essential that the products of their secretory activity should be removed. But in the class of case we are now considering this is rendered impossible, owing to some circumstance such as the birth of a stillborn child or its death soon after birth, or owing to some physical disability on the part of the mother, such as depressed, sore, or ulcerated nipples, &c. The result is that retention of milk takes place to a greater or less extent. *Hence any circumstance which favours the retention of milk once duly secreted should be regarded as a likely cause of cancer. Over-suckling, retention of milk through non-suckling, the use of certain kinds of applications which we are now about to consider, are all in the nature of "insults" to the delicate secretory cells of the mammæ, which, after a shorter or longer time, may show their resentment by becoming cancerous.* Roger Williams maintains that cancer rarely originates during pregnancy or lactation. But I have little doubt that these "insults" so frequently offered during the lactation period are often the *fons et origo* of the process, though it may not be until after the lapse of several years that the cancer makes its appearance.

(*d*) *Use of Applications.*—At the time of weaning the child, or in case it dies at or soon after its birth, mothers are frequently in the habit of adopting, or are recommended to adopt, some treatment with the view of "drying up" the milk. This I found had been done in 20 per cent. of cases. Of the various substances and liquids used I may mention the following: Brandy, oil and milk, linseed meal, camphorated oil and basilicon ointment, hartshorn oil, diachylon plaster and "green oil," vaseline and "goose oil," butter and brandy, spruce, butter, brandy and sweet oil, brandy and salt, brandy and butter, bitter aloes, beeswax and honey. The following

applications had also been made use of: hot-water bottles, and rags steeped in gin. I would ask, is it not probable that the rubbing in of such preparations, and the adoption of such means of "drying up" the milk, is a source of irritation to the mammary cells, and so contributes to the formation of cancer?

Previous Diseases of the Breasts Unconnected with Lactation.

In 20 per cent. of the cases there was some previous trouble or disease of the breasts unconnected with lactation, of which the following is a brief summary:—

Of all the previous diseases of the breasts unconnected with lactation which seems most liable to cause cancer, I would mention depressed or small nipples (found in four cases), sore, ulcerated, or split nipples (found in seven cases), and Paget's disease (found in three cases).

Injury.—In 37 per cent. of cases there was a definite history of injury, and in thirty-two of these cases the cancer developed on the same side as the injury. The length of time between the receipt of the injury and the first appearance of the growth varied between three weeks and thirty-one years; the average time was found to be three years and nine months. *In two cases injury was the only cause to be found to account for the growth. In two more cases a history of injury together with residence in damp houses and districts were the only assignable causes.* In by far the majority of cases the injury to the breast took the shape of a knock, either accidental or otherwise, with the closed fist or elbow, or a fall or a knock against some article of furniture, such as a chair, corner of a table, or a ladder.

The fact that in so many cases the cancer developed on the same side as the injury, *and almost invariably at the exact spot injured*, shows without a doubt that we must regard traumatism as a common factor in the production of cancer of the breast. *But though injury is almost invariably found combined with other causes, yet I believe in a small number of cases it is capable of itself of originating the cancer.*

Corsets. — I found that women are most particular in seeing that their corsets are comfortable, and in immediately changing them if found not to be so. But corsets with "bones" of some kind, made either of whalebone, cane, or

steel, are worn, and these may, especially if the corsets are ill-fitting, cause undue pressure against the breasts. Therefore, while I think it is possible that the wearing of *unsuitable* corsets may take some share in producing cancer of the breast, my enquiries show that such a cause is present in only 7 per cent. of cases. On the other hand, provided the corsets are well made and comfortable, as is usually the case, I am of opinion that they can exercise little or no influence in this direction.

Worry and Anxiety.—In 35 per cent. there is a history of *unusual* worry and anxiety *before* the cancer appeared. Exactly to what extent these facts justify us in ascribing mental grief or anxiety, &c., as causes of cancer of the breast it is very difficult to determine, but we probably shall not be far wrong in concluding that in about 35 per cent. of the cases undue mental distress of some kind takes a share in the production of cancer of the breast.

Residences, Damp &c.—Haviland's view is that cancers particularly flourish in those parts of the country which are low and flat, are covered by alluvium, and are watered by many streams which frequently overflow their banks and flood the surrounding country.

To what extent residence *in a particular soil* should be held responsible for cancer of the breast I have been unable to determine, because the majority of patients whom I questioned on this point were quite ignorant of the nature of the soil on which they had lived, and, moreover, many had lived in several districts before the onset of the cancer. It was, therefore, clearly impossible to come to any conclusion on this point. But I have instead made careful enquiries into the perhaps more comprehensive question of damp, position of house lived in, with reference to situation near a river or canal, &c., with the following results:—

(*a*) In 30 per cent. of cases there was a well-marked history of damp in some form or another. (In many of these there was a history of residence near a river or canal, &c.)

(*b*) In 17 per cent. of cases there was a history of residence near a river or canal, but with the exception of fogs and occasional mists no marked history of damp.

(*c*) In 53 per cent. of cases there was no history of damp either in the house or district, and no residence near a river.

Regarding Haviland's view that residence near a river which overflows its banks is a cause of cancer (without any reference to the nature of the soil), the facts just quoted tend rather to support it, for out of the thirty cases included under (*a*) there are eighteen in which at one time or another patients had spent a certain part of their lives close to a river; these, together with the seventeen mentioned under (*b*), make thirty-five cases in all. Out of this number, in seven instances the river had overflown its banks, and in some cases it had actually flooded the house to a greater or less extent.

On the other hand, my histories show that there are a great many instances of damp being present without patients ever having lived near a river or on marshy ground, and as we have already seen, the greater number of patients have not spent all, or indeed the greater part, of their lives in one place only, but in several. It is clear, therefore, that we cannot assign residence in any particular locality as the *sole* cause of cancer of the breast. The evidence before us rather points to the fact that damp in any form may act as a cause.

Again, in some cases there is a definite history of defective drainage, residence near stagnant water, living in a room in which there are cisterns, or inhaling impure air. These are factors which may also be regarded as taking some share in the production of mammary cancer, especially when we find associated with it one or more of the following: A family history of consumption; errors of lactation, or injury.

General Health, Occupation, &c.—(*a*) *In* 61 *per cent. the general health was good;* (*b*) *In* 29 *per cent. the general health was bad or indifferent.*

Cancer of the breast is therefore more than twice as frequent amongst those whose previous health has been good than in those in whom the reverse is the case. I may observe that under the heading (*b*) there are six cases which may be taken as showing a tendency to consumption.

The majority of cases of cancer of the breast occur in those whose general health has been perfectly good but amongst those in whom it has been bad or indifferent it seems that there is a somewhat undue proportion of those who have a tendency to consumption.

Occupation.—The trades followed are of so varied a kind that we cannot regard any of them as being a special cause of

cancer; but whatever the occupation of the patient may have been — whether she has simply performed her household duties, been out in service, or followed some definite trade— there is in 11 per cent. of cases this one feature in common, viz., a history of lifting heavy weights, moving heavy articles of furniture, or helping to move a more or less helpless person, &c. In other words, a strain of some sort has been experienced. I cannot, therefore, help regarding strain as a likely cause of cancer of the breast; and that such is not an unreasonable view to take is shown by the fact that "recurrences" after removal of the breast are sometimes observed almost immediately after the occurrence of a strain, or after the too vigorous use of the arm of the side operated upon.

Cancer, Infection with.—In 31 per cent. of cases there is a history of a *possible* infection of cancer; but that such was the cause of the cancer of the breast seems, in the majority of cases, at any rate, to be doubtful, though we cannot absolutely deny its possibility.

Tubercle, Infection with.—In 12 per cent. there was a history of a possible infection with tubercle.

"*Cancer*" *Houses.*—Throughout this series there are only two instances in which the onset of the cancer could possibly be ascribed to residence in a so-called "cancer house."

The first case is where the patient, in 1893, on about fifty occasions rested in a room formerly occupied by a butcher who in 1891 died of a growth which was possibly cancer; and the second case where a patient for three years occupied the same bedroom as a former wife who died of cancer of the breast.

I have now considered the various clinical causes of cancer of the breast, and have endeavoured to show the relative frequency with which these causes are met with. *It will be observed that the four antecedent events most constantly present are: (a) Errors of lactation; (b) family history of consumption; (c) injury; and (d) worry and anxiety. We must therefore regard these as the four most common causes of cancer of the breast,* and must conclude that cancer of the breast is almost invariably due to a *combination of causes.*

The clinical facts contained in these histories should, I think, convince us of the uselessness of looking for *one* cause or formulating *one* theory only to account for the origin of cancer of the breast, and if this is true for cancer in one region, it

follows that the attempt to find a single clinical cause for the occurrence of the disease in all the different localities of the body must *a fortiori* be more futile still.

If a more extended experience should prove that what I have called probable causes are actual clinical causes, and such I feel sure will be the case, it necessarily follows that the majority of cases of cancer of the breast should be, and are, actually preventable.

"PRESSE MÉDICALE" for May 18, 1904, quoting *Le Scalpel*, No. 36, 1903, states that Aronsohn of Ems has succeeded in stopping abruptly an acute asthmatic seizure by painting the nostrils with a 1 to 1,000 solution of adrenalin hydrochloride. The treatment is only palliative. If the congested parts are not easily reached, one of the following formulæ may be tried:—

℞ Adrenalin hydrochloride, 1 to 1,000 ... ... 1 part
Liquid petrolatum ... ... 2 parts
M. For a spray.

℞ Adrenalin hydrochloride, 1 to 1,000 ... 1 to 5 parts
Lanolin } of each ... ... 5 parts
Petrolatum }
M. Place a quantity the size of a pea in the nostril.

THE SEWING MACHINE AND HEALTH.—Nussbaum refers to statistics and his own experience to show that the position at the machine and the constant use of the legs are liable to cause congestion in the female genitalia and consequent inflammation. The menses are frequently very irregular, and abortions, inflammation of the adnexa and other gynæcologic troubles are unusually prevalent in this class of working women. He advises that they should take especial pains to sit erect and breathe deep, frequently rising to change their occupation or to step out of doors or practise respiratory gymnastics. Good ventilation and illumination are particularly necessary for persons who have to use the sewing machine constantly.—*Klin. Rund.*, Vienna.

Reports of Proceedings.

ORDINARY MEETING.—Clinical Evening, Friday, January 6, 1905.

C. M. Tuke, Esq., M.R.C.S., President in the Chair.

The minutes of the previous meeting were read and confirmed. The following gentlemen were duly elected members of the Society: Louis O. Croswell, M.B., C.M.Aberdeen, District Medical Officer, Black River, Jamaica; Augustus H. Dubourg, L.R.C.P., L.R.C.S.Edin., 51, Chester Terrace, S.W.; E. W. Hedley, M.A., M.B., B.C.Cantab., 56, Hans Place, Sloane Street, S.W.; Cecil H. Leaf, M.A., M.B.Cant., F.R.C.S.Eng., 75, Wimpole Street, W.; Charles Murray, M.A., M.D., D.P.H.Aberd., 53, Trinity Road, Wimbledon, S.W.: Douglas R. Pike, M.A., M.B., B.Ch.Oxon, 3, Cromwell Crescent, Kensington, W.; E. M. Wilson, C.B., C.M.G., D.S.O.; Lieut.-Colonel R.A.M.C. (Retd.). M.R.C.S.Eng., L.R.C.P.Lond. Royal Military Prison, Aldershot.

Three gentlemen were nominated as members.

A Case of Acromegaly.

Dr. Z. Mennell: The case I am showing this evening, one of acromegaly, is typical. The man is aged 42, a carpenter by trade, and first came to me in 1902, when I induced him to attend the O.P. department here.

In 1883 he entered the Army, and his measurements then were as follows: Weight 10½ st., height 5 ft. 10⅛ ins., chest 37 ins., circumference of head 21 ins, boots, size 8; and these are in marked contrast to those of 1902: Weight 19 st. 3 lbs., height 6 feet 1 in., chest 47 ins., head 25½ ins. Up to 1887 he was in very good health and he could sing well. From 1887 onwards he had to constantly get larger hats and boots, in 1900 he had to have his hats, boots and gloves made for him as the largest stock sizes were too small, and the size increased every six months.

As you will have seen in the photographs, his entire expression has changed, the lower jaw and forehead now being very prominent and causing a deep depression in the superior maxillary region. The lower teeth project a good half inch in front of the upper ones. He sweats profusely. Eyesight good, no fundus change, no hemianopia. Headache is the chief subjective symptom, and this is always occipital. Muscular strength very good.

When he came here as an out-patient he was given tabloid pituitary body for nine months, and while taking this his headache became more marked, but got better when left off. Curiously, since then (two and a half years) he has worn the same hat, boots, &c., and there has been no obvious increase elsewhere.

A Case of Old Standing Mitral Stenosis with Choreic Movements.

Dr. A. MORISON: The first case I show is of interest as bearing on the prognosis of heart disease and its association with a central nervous affection. It is that of F. B., aged 76 years, late a warehouseman. He was apprenticed to a jeweller as a boy, and at the age of 14 years suffered from rheumatic fever, which affected his heart, and was followed immediately afterwards by an affection of the right arm, characterised by choreic convulsive movements. These unfitted him for the trade of a jeweller. When 30 years of age he had a second attack of rheumatic fever, which, curiously, was followed by an affection of the left arm resembling that of his right arm. Notwithstanding his cardiac and bronchial conditions he followed his occupation as a warehouseman in the same firm for over fifty years. The heart shows a presystolic bruit at the apex, audible over a limited area, and not heard in the back. There is no notable hypertrophy of the organ, and he is otherwise sound. The movements are athetolic in character and possibly of embolic origin.

A Case of "Renal Heart."

Dr. A MORISON: The second case I bring before the Society is that of a man aged 51, a tailor, who shows a general arterio-sclerosis with the signs of granular contracted kidney —a union of low specific gravity, one-third albuminous and containing granular casts, some of which have adherent degenerated epithelium.

My special purpose in showing the case is to demonstrate the character of the so-called "Renal Heart," which is seen in this case in an unusually pronounced degree. The area of cardiac dulness is increased, the impulse of the organ much exaggerated and the booming and metallic accentuation of the aortic second sound is to be heard in an exceptionally marked degree. The patient, who is the son of a man who died of chalky gout, has led the sedentary life of his calling and has not been a drunkard. It is probable, therefore, that hereditary influences have played an important *rôle* in the formation of his present state, aggravated by his confined life.

Dr. A. GASTER: In the first case I question how it is that

if the choreiform movements are of cortical origin, why they are limited only to the upper limbs, whilst the lower are free from any movements? The case is a very interesting one from a pathological point of view.

With regard to the second case there are very marked signs of atheroma of the aorta. I noticed also a musical systolic aortic second sound which was very loud.

Dr. A. MORISON: I cannot agree with Dr. Gaster as to the presence of valvular incompetence in the second case I have shown. I believe the wide area of audibility of the accentuated aortic sound is due to its loudness.

A Case of Tonsillar Disease.

Dr. J. B. BALL: The patient is a man, aged 52, a sailor by occupation. There is no history of syphilis, only a history of gonorrhœa, twenty-five years ago. He states that about five or six months ago the right tonsil became swollen, but was not painful. He was treated as an out-patient at two hospitals for about three months, and for some weeks was given pills which he was told contained mercury. He thinks that the treatment reduced the size of the swelling. He first attended at the West London Hospital early in November last. There was then considerable enlargement of the right tonsil, involving the tissue around the tonsil, extending up into the soft palate, and down into the pharynx. He complained of some dysphagia, but had no actual pain. There were no enlarged glands to be made out. The surface of the swelling was breaking down at one point, and a probe could be inserted for a considerable depth, apparently into broken-down tissue. The hole gradually enlarged and a quantity of necrosed *debris* was discharged, leaving a large cavity, which still persists. Meanwhile the size of the swelling diminished a little, and he could swallow more comfortably. Within the last fortnight, however, he has had more discomfort, and some difficulty in opening the mouth widely. The infiltration in and about the tonsil has increased a little, and some enlarged hard glands have been felt in the upper part of the right side of the neck, under the angle of the jaw, and under the upper part of the sternomastoid. When I first saw this patient I had little doubt that the swelling was a gumma. He was put on ten grains, and afterwards on twenty grains, of iodide of potassium. As he did not respond much to the treatment, actinomycosis was suggested, but scrapings from the interior of the cavity failed to show anything characteristic. Lately a small portion was excised from the tissue at the edge of the cavity for microscopical examination. Dr. Candler has reported on the specimen as follows: "The

surface epithelium shows considerable proliferation, and a tendency to send down irregular tongue-like processes into the underlying tissue, suggesting that the tonsil may shortly, or, indeed, may have already, become the seat of malignant change."

The way in which the swelling of the tonsil developed rapidly and painlessly, and showed some improvement under specific treatment, and the way in which the interior broke down and was discharged, makes it very probable that there was a gummatous formation. My idea is that the case is one in which syphilis and malignant disease are combined.

Dr. A. GASTER: With reference to Dr. Ball's case, I wish to relate the case of a young man with apparently no history of syphilis, who developed a swelling on the right tonsil, which was red and hard. It necrosed and left a big, ulcerated cavity, like this case. The patient lost flesh, looked very ill, and as he did not improve under iodide treatment, I saw Mr. Watson Cheyne, and we found but two scales on the elbow, and could not find tubercle bacilli; we decided to treat it as a gumma, and after a severe mercuric and iodide treatment, he has, after eight months, entirely recovered. I would suggest that the patient be treated by mercury in large doses, and iodide of potassium, before accepting it as a pure case of epithelioma. Of course it is rare to see a gumma turn into an epithelioma.

Mr. G. PERNET: I do not gather from Dr. Ball's remarks that he treated the patient in hospital with mercury. Syphilis, in whatever stage, cannot be said to have been adequately treated unless mercury has been exhibited. I would insist, too, on the importance of giving mercury alone, apart from iodide of potassium.

Mr. R. W. LLOYD: I would suggest that mercuric treatment be locally applied if it has not been tried yet, bearing in mind the marked influence such treatment has upon gummata elsewhere when combined with the internal administration of antisyphilitic remedies.

Dr. CAMPBELL POPE: I had a case of great interest, bearing on the point which is now being raised as to the value of mercury in tertiary developments of syphilis. A man with a gumma in the brain, after being treated for a long time with potassium iodide without success, on being put on mercurial treatment rapidly improved, and the paralytic symptoms cleared up.

Mr. J. T. ARMSTRONG: In view of the pathological report, I do not find myself in agreement with the proposed mercurial treatment; I should suggest antiseptic applications to the tonsillar region until the exact cause of lymphatic enlargement is determined.

Dr. J. B. BALL: The diagnosis of the case is not certain, but the combination of tertiary syphilis and malignant disease seems the most probable view, for the reasons I have given. He has been treated with mercury and iodide of potassium during the last few weeks, but previously he took iodide alone. He has not had a course of mercury apart from iodide of potassium since he has been under my care, but apparently he had a course of mercury before he came to the West London Hospital.

A Case of Granuloma Annulare.

Mr. JOHN GARRETT: The case I am showing to-night is more for diagnostic purposes than because I know much about it. I saw it first some six or eight weeks ago, when there were two ringed eruptions on the child, one on the back of right hand and the other over left ankle on the inner side. I confess I had not seen anything similar before, so sent it to St. Mary's Hospital to be seen by Dr. Graham Little. I had a communication from him, thanking me for sending it. The child was shown at the Dermatological Society in December of last year, and I find that Drs. C. Fox and Pernet, who both saw it there, are present to-night; they doubtless know more about it than I do, and I trust they will favour us with their opinion of the same.

The previous history of the case is as follows: the child had a papula and rash on arms and legs at the end of July last year; this all disappeared with the exception of one on the back of right hand and the other on left ankle; these gradually enlarged, without any sore, the centres gradually resuming a normal condition, whilst the margins were indurated and elevated. A section was taken from the one on the ankle, and it was examined microscopically; it was found to be infiltrated with inflammatory material around the sweat ducts. I was informed it was a case of granuloma annulare, but yesterday I received a communication saying it was not.

Dr. COLCOTT FOX: The eruption is a very rare one and the etiology is quite unknown. I recognise the present case as precisely similar to that of a child I presented to the Dermatological Society of London in 1895. With regard to the name *granuloma annulare*, under which in all probability several distinct affections are included, I think it a very bad name. In the first place it is too vague, as it would apply to the annular lesions of syphilis, leprosy, mycosis-fungoides, &c., and in the second place the lesion in this particular case is not a granuloma.

Mr. G. PERNET: In my opinion Dr. Garratt's interesting case does not come into the category of the conditions labelled

granuloma annulare. I have had the advantage of seeing several instances of the latter disease. I have brought sections from one such case, which the members have seen under the microscope in the next room. The name has been objected to, but I may say it was given on the strength of the clinical appearances before any material for histological examination was obtained. I agree that it is not a good name, as the microscopical features of my sections do not exhibit the characters of a granulomatous growth, but correspond rather to those of the condition named *lichen annularis*, with which it is very probably identical. As to the vagueness of the name granuloma annulare, it is less vague than calling the condition merely a "ringed eruption." It is possible, again, that the cases covered by granuloma annulare and lichen annularis may not all be of the same nature, as pointed out by the previous speaker. As to the sections from Dr. Garrett's case, owing to their damaged condition and somewhat indefinite staining, it is difficult to compare them with those I am showing, but as far as can be seen they do not appear to me to be one and the same thing.

Bilateral Ankylosis of Jaw.—Result of Operation.

Mr. D. J. ARMOUR: This patient, a girl aged 26, is the one shown at the last Clinical Meeting of this Society. She then had complete bilateral bony ankylosis of the lower jaw dating from infancy, without definite cause, unless it be injury of which there was a doubtful history. At operation, a vertical incision one and a half inches long was made a quarter of an inch in front of the ear, with its centre over the condyle of the lower jaw. From the centre of the vertical incision another, half an inch long, was carried forwards along the lower border of the zygoma. The condyle was found completely fused with the zygoma. The condyle was resting on the eminentia articularis, and formed with the tuberosity of the zygoma a solid mass of bone of ivory-like hardness. There was no indication of any line of demarcation between the condyle and the zygoma. On the inner side of the specimen shown, however, there is seen a faintly marked line. The zygoma, just in front of and behind the tuberosity, and the neck of the jaw were cut through. The ramus was then found to be moveable. The same operation was repeated a few days later on the other side, where an exactly similar condition was found. The jaw has been moved several times since under an anæsthetic, but great difficulty has been experienced in getting any purchase for the gag owing to the looseness of the teeth, their irregular eruption and the softness of the alveolar margins. The patient can now separate her jaws easily and well, is able

to eat solid food for the first time in her life, and talks plainly. I have had the benefit of the opinion of Mr. Lloyd Williams regarding the treatment of her teeth since the operation.

Case of Polycystic Kidney.

Mr. D. J. ARMOUR: The patient is aged 29, married, no children, no miscarriages. Attended Dr. Robinson's clinic complaining of pain across the loins and in the side, stiffness and pain in the legs after walking, so that she had difficulty in getting about; pain in the abdomen after walking, and constant frontal headache. She was a pale, anæmic woman, with a dull muddy complexion and a worn tired look. Her pelvic organs were normal, but on examination of the abdomen a large oval tumour was found on the left side occupying the position of the left kidney. She was quite unaware of its presence. It was slightly movable, dull on percussion, with intestine lying in front of it. It was only painful on deep pressure. She was seen from time to time for eight weeks, during which time there was no appreciable alteration in the size of the tumour, while the pain and headache were increasing. Her urine was acid, sp. gr. 1024, no albumen, no sugar, no blood, nor could a history of previous hæmaturia be obtained. Her optic discs were normal, no retinitis, no hæmorrhages. The apex beat was in the fifth interspace, felt as far out as the nipple line. By percussion the left border is ½ an inch outside the nipple line. Action regular. Very faint systolic murmur at the apex not conducted out. Second sound at the base sharp and accentuated. Pulse: No high tension; artery felt to be somewhat thickened.

On operation the tumour was exposed by the usual oblique incision in the loin. There were well marked signs of previous perirenal inflammation, and some difficulty was experienced in separating the perirenal tissue from the tumour, so that the peritoneum was accidentally opened. As soon as the polycystic nature of the kidney was recognised, advantage was taken of this opening to palpate the other kidney. This was found to be normal. The large polycystic kidney was then removed. The artery and vein were secured together by a ligature, and this pedicle then transfixed and ligatured again; the ureter, which was tied as low as possible, being ligatured separately. A drainage tube was left in the upper angle of the wound. The patient made an uninterrupted recovery. Her headache and abdominal pain disappeared immediately after the operation. Her urine, which was examined frequently by Dr. Candler during convalescence, showed a normal excretion in the twenty-four hours both in

quantity and amount of urea. The second day after operation there was 1 per cent. of albumen. This was found on all other occasions in only very slight traces, too small to be estimated.

Mr. C. M. TUKE: I congratulate Mr. Armour on the successful result of operation in these two cases. I would like to enquire whether, in the first case, the aid of the dentist can be expected to still further improve the conditions.

Mr. J. R. LUNN: I think we all must congratulate Mr. Armour on the results of the operation upon his case of bilateral ankylosis of the jaw.

I think these cases are somewhat rare, and I should like to ask Mr. Armour what he thought was the cause of the ankylosis? It is a remarkable fact that the temporo-maxillary articulation enjoys considerable immunity from disease—certainly ordinary disease is rare. Many cases of ankylosis of the temporo-maxillary articulation have been supposed to be due to pyæmia, and some *post mortems* have been done on cases caused by suppuration of the middle ear. Of course, the most common cases are of rheumatic origin.

Dr. A. MORISON: I only wish to suggest in connection with the etiology of this case, and in agreement with the remarks of Mr. Lunn, that the condition may have been attributable in infancy to an ophthalmia neonatorum of gonococcal origin.

Mr. MCADAM ECCLES: I think there are two chief conditions causing closure of the jaws, and they are different in character and require a different treatment. The first is the pseudo-ankylosis of arthritis deformans, and the second is the true bony ankylosis induced by suppurative arthritis. In the former, probably the removal of a wedge-shaped piece from the junction of ramus and body; in the latter, a free excision of the bone at the articulation itself would be the best treatment.

Dr. A. GASTER: I should like to know what was the condition of the urine, whether a cystoscopic examination has been made, whether both urethras functioned equally well, and how much kidney substance has been left in this specimen?

Mr. E. P. PATON: The kidneys, such as the one shown, are usually said to be of congenital origin, but it is a curious fact that they very often do not give rise to any symptoms until the patient is grown up. A little time back I saw an exactly similar case to the one shown in a man of about 60.

These kidneys sometimes give rise to the most acute pain, and the most severe attack of renal colic which it has ever been my misfortune to see was in a young man from whom

a kidney of this polycystic nature was removed a few days after the attack.

ORDINARY MEETING.—Friday, February 3, 1905.

C. M. TUKE, Esq., M.R.C.S., President, in the Chair.

The minutes of the last meeting were read and adopted. The following gentlemen were elected members of the Society: Boyd Burnett Joll, M.B.Lond., M.R.C.S.Eng., 8, Hanger Lane, Ealing; Charles Archibald Lees, M.R.C.S.Eng., L.R.C.P., 39, Lavington Road, West Ealing; C. Spencer Palmer, M.R.C.S.Eng., L.R.C.P.Lond., Broke Lodge, Redhill.

Three gentlemen were nominated for election.

Mr. J. D. MALCOLM read a paper on Extra-uterine Fœtation (see p. 81).

The President made a few remarks, complimenting Mr. Malcolm on his paper, and invited members to discuss the subject.

Dr. MANSELL MOULLIN: I am sure we are much indebted to Mr. Malcolm for his very interesting paper; but at the same time I do not hesitate to say I cannot accept his views on the matter of treatment. Internal hæmorrhage is the symptom which characterises ectopic gestation, and by which its occurrence is made known; and the treatment of ectopic gestation, in the earlier months at least, resolves itself into the treatment of internal hæmorrhage.

We are probably all agreed that in a case of diffuse hæmorrhage the only reliable means of arresting the bleeding is to open the abdomen and secure the ruptured vessels. But I wish to refer now more particularly to that larger class in which the hæmorrhage is more slowly effused and tends to form a pelvic tumour, which we designate by the term hæmatocele. Mr. Malcolm sees no necessity for operation in many of these cases, and believes they get well of themselves. He advises keeping the patient in bed for some weeks and watching to see if the tumour increases in size. Now, I speak with confidence of the result of many years' experience, and I am convinced that such procrastination, if it does not lead to serious consequences, is only waste of time. All cases of pelvic hæmorrhage or suspected hæmorrhage call for operation. There are many strong reasons for this. (1) When the hæmorrhage has ceased and the patient appears to be rallying, it does not follow that the danger is over. Quite the contrary; a recurrence may occur at any moment,

and I have known it to do so between the time of seeing the patient and the operation twenty-four hours later.

(2) In all cases expectant treatment signifies a protracted convalescence. The bood, owing, no doubt, to encapsulation, is absorbed very slowly, and weeks later may he found practically unchanged. The presence of the tumour excites fresh effusion of lymph, and the various organs become massed together, and eventually some ill-defined painful swelling necessitates an operation. My patients are well enough to be up by the end of the second week.

(3) In a certain percentage of those cases left to Nature's efforts, bacterial infection of the clot takes place. The patient, instead of convalescing, becomes worse, and finally operation is a matter of necessity. My experience is that an abdominal operation undertaken for the removal of putrid blood clot is invariably fatal. If the septic condition is recognised, which is seldom the case, and the tumour presents in the vagina, the latter route is the preferable one for operation. A free opening should be made in the posterior wall and the clot well flushed out with hot water without disturbing the limiting adhesions which separate it from the general peritoneal cavity. A strip of gauze should be placed in the opening to keep it patent.

(4) The difficulty of diagnosis. Enlargement of the tube from an arrested ovum is difficult to distinguish from salpingitis due to any other cause—it may be gonorrhœa. Again, possibly no hæmorrhage has occurred, but the owner is alive and making further progress. Under all these circumstances, as I have said, "watching and waiting" is time wasted to no purpose. At a later stage, when the fœtus is approaching maturity, we are met by considerations of a totally different character, and I am certainly in accord with those who advocate waiting for the death of the fœtus before attempting operation. We know from actual experience that after the fourth month is completed the danger of rupture has passed. The ovum has, so to speak, established itself securely, and although the fœtus may perish at any time, its presence, if living, ceases to be a source of danger to the mother. The extraction of a dead fœtus is the simplest of operations; I speak with an experience of ten cases at full time, and the mother in every case convalesced as rapidly as after the removal of a cystoma. It is a totally different matter to attempt the extraction of a living fœtus and a live placenta. No case has yet been recorded where mother and child have both been saved.

The difficulty of diagnosis between ectopic and extrauterine gestation even at full time may be very great, as Mr. Malcolm points out.

Dr. DRUMMOND ROBINSON: I quite agree with Mr. Malcolm in his view that operation is not called for in every case of extrauterine pregnancy. In former times pelvic hæmatoceles (the vast majority of which are the result of extrauterine pregnancy), were not treated by operation, and most cases recovered. I have had the opportunity of reading the records of all the cases of hæmatocele that have occurred at a large London hospital during the last few years, and which were treated in the way advised by Mr. Malcolm. The history of these cases does not support the views expressed by Dr. Mansell Moullin. I have now for some years carried out a similar line of treatment in such cases, and I have had no reason to regret doing so.

Dr. SEPTIMUS SUNDERLAND: I offer my thanks, with those of the other speakers, to Mr. Malcolm for his instructive paper.

There is one question I would put to Mr. Malcolm: "In what proportion of cases coming under his notice, has he observed that there has been no absence of the menstrual flow?" In some cases I have seen, the menstrual periods have—according to the patients' statement, occurred regularly during the early months of extrauterine gestation, and this one symptom, which would assist in elucidating the condition, has been absent.

I think there has been no reference in the paper to the absolute necessity of using the greatest gentleness when examining a patient for a suspected unruptured tubal gestation. This fact was forcibly brought to my notice some years ago, when I saw, in consultation with a medical man, a patient who had been suffering for some days from pelvic pain. As she was obese and had rigid abdominal muscles, chloroform was administered to facilitate a satisfactory examination. Per vaginam I felt a small rounded swelling to the left of the uterus, and then asked my friend to examine her, stating that as the swelling was probably an unruptured tubal gestation, he should not use any more pressure than was absolutely necessary. While he was examining the patient she suddenly became blanched, collapsed and almost pulseless. We stayed with her two hours, considering she was moribund; she was at least too collapsed for an immediate operation. At the end of that time there was dulness on percussion over the lower abdomen extending slightly above the umbilicus, due to hæmorrhage into the abdominal cavity. The patient rallied, underwent operation some weeks afterwards and recovered.

Mr. J. D. MALCOLM, in reply: I am very pleased to find what you, sir, have called a healthy difference of opinion. With regard to Dr. J. A. Mansell Moullin's view that all cases of hæmorrhage should be operated on when diagnosed

or inspected, I am quite sure that the first reason he gives does not hold good in all cases. A second hæmorrhage may not occur. We should look out for it, but we cannot expect it, and if it occurs it is not necessarily fatal. His second reason for operating at once, namely, the fear of septic complications, is only of importance in certain circumstances. It is remarkable how seldom the blood effused in these cases becomes septic. Indeed, if there is no great tension, it is not usual for the parts to become septic. When there is a very tense mass of blood in the pelvis and a probability that the bowel wall is adherent, and subjected to severe pressure or traction, sepsis is very likely to arise, and in such a case the abdomen should be opened at once, but the mere presence of blood in the peritoneal cavity does not necessarily cause sepsis. As a third reason for operating, Mr. Moullin said that the capsule of the blood cyst is persistent. I do not think this is always the case, and it is with a view to observing what will happen in this respect that I advise watching a patient, if she can be efficiently watched, when the symptoms are not very urgent.

Mr. Moullin's fourth reason for operation was the uncertainty of diagnosis. He said the condition might be due to an acute abscess. I think that the two conditions may fairly be cases of different ideas, but in the case of a difficulty of this kind, if the conditions are very acute, I advocate immediate operative treatment.

I do not wish to take up a position that is strongly antagonistic to surgical treatment in these cases. I think, however, that when the symptoms are not severe, and if the patient can be closely observed, a resort to surgery is a matter for serious consideration. There is one other important reason for not operating, although it is not always a good one, namely, that sometimes the patient will not allow it, and sometimes the medical attendant in charge will not allow it, and I think that, when the symptoms are not urgent, and when the circumstances are favourable for interfering at once, if necessary, they are quite right in adopting this course. Many cases get well without operative interference. Mr. Moullin did not agree with my views on the danger of the presence of a dead fœtus. In reading my paper I somewhat shortened it, and I am not sure if I fully stated my opinion on this subject; but in writing the paper I laid very great stress on the dangers which may arise from septic infection in those cases. I wrote that some of the most hopeless operations in surgery are those undertaken for the removal of an extra-uterine fœtation, when the sac communicates with the small intestine, perhaps in several places. I understood Mr.

Moullin to say that it is not possible to save the mother and the child, but there are cases on record in which this has been done.[1] It is certainly not possible to do so if we wait till the child is dead. I fully agree with Dr. Robinson's remark on the slight importance that may be attached to an adherent ovary, but of course the treatment varies with the symptoms. In reply to Dr. Septimus Sunderland's question, I am quite sure that menstruation is not *always* in abeyance until the tube ruptures, and of course the greatest care in making an examination is necessary, so that a "rupture may not be precipitated."

Dr. McCann delivered an address (illustrated by a large series of lantern slides) on the "Early Diagnosis of Cancer of the Neck of the Womb." A short description was given of the normal anatomy of the cervix and the importance of the "transitional area" (*i.e.*, where the squamous epithelium covering the vaginal portion joins the columnar epithelium lining the cervical canal) was specially emphasised as the starting-point of malignant growths.

The subject was considered under two headings:—

(1) Cancer affecting the vaginal portion (portio vaginalis), and (2) cancer affecting the cervix proper.

This distinction, however, is not possible in early examples of the disease, for the advent of ulceration alters the relationship of the different parts of the cervix. Three clinical types of cancer of the vaginal portion of the cervix occur:—

(*a*) The papillomatous or polypoid type, where a sprouting growth extending downwards into the vaginal canal originates by a somewhat broad base from the margin of the external os uteri. In this class is included the so-called *cauliflower excrescence.*

(*b*) The infiltrating type, where the tissue of the vaginal portion is infiltrated with cancerous growth, one or both lips of the cervix being affected.

(*c*) The superficial flattened type, prone to early ulceration. Here the growth creeps over the surface of the vaginal portion, and as there is a tendency to early ulceration, a true malignant ulcer in an early stage is seen.

Two special types of cancer affecting the cervix proper may be identified:—

(*a*) Superficial carcinoma of the mucous membrane of the cervix proper, characterised by the growth of papillomatous masses of different sizes in the interior of the canal, followed

[1] T. R. Jessop, *Obstet. Soc. Trans.*, vol. xviii., p. 261; J. W. Taylor, *Obstet. Soc. Trans.*, vol. xxxiii., p. 115.

later by ulcerative changes which hollow out the cervix and produce the characteristic crateriform ulcer.

(*b*) The infiltrating type, where the walls of the cervix are infiltrated in part or in their entirety with cancer.

This last type tends to spread rapidly to the lymphatica, and hence is frequently discovered when it is beyond hope of eradication.

The early signs of cancerous diseases are discharge and hæmorrhage.

Discharge is the first sign but hæmorrhage is *the sign* which prompts the patient to seek advice. It will be found that careful enquiry into the history of early cases will elicit the fact that an alteration in the quality and quantity of the cancer discharge is observed before any bleeding has occurred. For this reason all cases of discharge, or atypical bleeding should be carefully examined, and the os uteri inspected through a speculum.

The signs elicited on examination are as follows:—

(1) Friability, a sign of great importance which can be tested by the finger-nail, the curette, the uterine sound, or a long probe. If there be much fibrous tissue present in the growth friability may be entirely absent.

(2) The occurrence of bleeding, the amount of which is entirely out of proportion to the extent of the injury inflicted.

(3) The definite occurrence of new growth from the surface of the cervix, from the lining of the cervical canal, or in the substance of the cervix.

The most common pathological changes in the cervix which may be confused with cancer are:—

(1) Erosion. In the common erosion there is no ulceration. It surrounds the os externum; the edge is not sharply defined, but fades away into the surrounding mucous membrane. Epithelial islets and plugged follicles may be noted on the surface, and there is no infiltration of the base.

(2) Chronic cervical catarrh in elderly multiparæ associated with fissures and hypertrophy of the cervical walls.

The examining finger passes into the patulous cervical canal, whose lining is rough and furrowed with thickened, hard cervical walls. On withdrawing the finger blood may be seen upon it.

Per speculum: The mucosa of the cervix is smooth, shining, bright red with total absence of any ulceration. It is only by or from pressure of the finger or sound that bleeding from the surface occurs, and above all neither the sound nor the sharp curette can detach pieces from the cervical lining. If still in doubt, the microscope may be used.

A full description was given of the different varieties of

ulcer met with on the cervix. The differential diagnoses from polypi and small myomata, distended follicles, &c., was given.

Dr. DRUMMOND ROBINSON: In advanced cases of cancer of the cervix uteri, I think all will agree that diagnosis is seldom difficult. In early cases the difficulty is much greater. I am myself in the habit of scraping the cervix with my nail in all doubtful cases, and I lay great stress on the presence or absence of friability of the suspected tissues. A friable cervix is almost certainly cancerous. Copious hæmorrhage on scraping is strong evidence in favour of cancer, but this sign is not, I find, so important as friability of the tissues, since it may sometimes occur apart from cancer. I always examine the suspected surface microscopically before performing so serious an operation as hysterectomy.

Mr. DONALD ARMOUR: I would like to ask Dr. McCann whether in cancer of the vaginal portion of the cervix he always performs a panhysterectomy or is satisfied with a supravaginal amputation; and whether, in cases of cancer of the cervical wall which infiltrates outwards into the broad ligament, he prefers the abdominal or the vaginal operation.

Mr. CECIL H. LEAF: I think Dr. McCann's paper a most valuable one, and am sorry that time did not permit of his finishing it. With regard to the diagnosis of cancer of the cervix, I should like to ask Dr. McCann exactly how much importance he attaches to the presence of ulceration. To show that we cannot always look back upon this sign as a reliable guide, I may mention the case of a woman who had ulceration of the cervix, and who gave a history of several severe hæmorrhages from the uterus. On examination the cervix was found ulcerated, the uterus slightly enlarged and freely movable. I diagnosed the case to be one of malignant disease and performed a vaginal hysterectomy. However, on cutting into the uterus after the removal, I found three small fibroids embedded in its walls, and a subsequent microscopical examination of the cervix showed ulceration, but no malignant disease. I think that bleeding on examination is a valuable sign in enabling us to diagnose cancer of the cervix in the early stage.

Mr. T. R. ATKINSON: This subject has become one of the most important to a general practitioner. Dr. McCann's photographs are therefore most interesting. The treatment of such diseases as diphtheria, scarlet fever, typhoid fever, and other fevers are being removed to a large extent from the treatment of the ordinary practitioner and dealt with in the hospitals, so that now one might say there is not much left but cancer.

I have had several cases during the last few months which

have all drifted into hospitals and returned no more. Specialists and consultants do not usually consider the injustice which is done to the practitioner who first sees those cases, and the loss to him of his moderate fees. The patients, after operation, are kept on attending the out-patients' departments often for several months. The practitioner, as Sir Isambard Owen once remarked, "sees the case at its commencement, but has, I fear, little chance of marking its progress." Could the council not arrange to give an evening for a conference on the subject of cancer.

Dr. McCANN: I desire to thank you, Sir, and through you the members of the Society for the cordial reception given to my paper. The group of cases to which Dr. Robinson has referred, viz., cervical hypertrophy with laceration, were frequently the cause of difficulty in diagnosis, and a description of the means of differentiating will be found in the paper. The importance of friability as an early sign has been emphasised and its absence in certain cases noted. The microscope could always be utilised in doubtful cases.

In reply to Mr. Armour's questions I am still in favour of supra-vaginal amputation of the cervix in early cases of cancer affecting the vaginal portion (papillomatous or polypoid type), whilst for other forms of cancer hysterectomy is to be preferred. Where the disease affects the cervix it tends to spread towards the bladder, ureters and rectum, and therefore free local removal is necessary; which is best accomplished from the vaginal aspect.

Abdominal hysterectomy is to be preferred in cases of cancer of the uterine body, the appendages and as much as possible of the broad ligaments being removed at the same time. The vaginal operation has also yielded good results in such cases, but the appendages and broad ligaments must also be freely removed.

I am interested to hear Mr. Leaf's description of an example of non-malignant ulcer of the cervix, but in such a case a very careful and thorough microscopic examination is necessary (special attention being paid to the growing edge of the ulcer), before cancer can be excluded. It would be found that apart from traumatism a *genuine ulcer* on the cervix was either malignant, tuberculous or syphilitic, and as the two last are rare, cancer should be suspected. Although exceptions might be brought forward, yet this was a useful clinical generalisation serving to impress upon practitioners the great importance of a true cervical ulcer.

In answer to Dr. Atkinson I would say that I gladly welcome the valuable aid which I have always received from patient's own medical attendant in watching and reporting the future progress.

ORDINARY MEETING.—Friday, March 3, 1905.

C. M. TUKE, Esq., President, in the Chair.

The minutes of the previous meeting were read and confirmed. The following gentlemen were balloted for and duly elected:

Crook, Herbert E., M.D., B.Sc.Lond., F.R.C.S.Eng., West London Hospital; Dick, W. Barclay, L.R.C.P.I., L.R.C.S.I., 79, Northfield Lane, West Ealing; Taylor, Thomas, L.F.P.S.Glasg., L.M., L.S.A., Lavington Road, Ealing.

Five gentlemen were nominated for election.

Mr. CECIL LEAF read a paper entitled "The Clinical Causes of Cancer of the Breast," see pp. 109.

Dr. S. D. CLIPPINGDALE: It seems to me that Mr. Leaf, by his paper this evening, has considerably enhanced his position as an authority on the subject with which it deals.

I was particularly interested in his remarks as to the coincidence of cancer with consumption, and the dependence of both these diseases upon a low-lying, damp soil. This has been pointed out before by Mr. Havilland ("Geographical Distribution of Disease,") and by Dr. Theodore Williams (Report to the Royal Medical Chirurgical Society.) In a paper published by myself (*Balneological Journal*) I also endeavoured to show that such diseases in London were more common in the low-lying but gravelly soils next or near the river, and that the healthiest parts of the Metropolis were the clay hills around it.

Mr. J. G. PARDOE: I think we all recognise by merely looking at the chart Mr. Leaf shows us that circumstances tending to lower the general health predispose an individual to the incidence of cancer. Thus the chart shows that prolonged and abnormal lactation, mental worry and anxiety, damp houses and defective hygiene are well marked features of a large proportion of his cases. But a general lowering of vitality predisposes the individual to almost any disease, so that we must look a good deal further in our search for the cause of cancer. The infectivity of cancer finds a place on Mr. Leaf's chart, but is hardly so much insisted upon as its importance seems to me to warrant. No surgeon nowadays would cut into a tumour of the breast as an exploratory measure, and, finding it to be cancer, use the same knife for the incision into healthy tissue for the removal of the growth. That is a practical illustration of the recognition of the infectivity of a cancerous growth. A few months ago I had occasion to remove a papillomatous growth from the bladder. Histologically this proved to be cancerous. Six weeks later,

the wound being firmly healed, three nodules had grown in the scar. I removed the whole scar, the sections showing that the knife passed in healthy tissue outside the nodules. Here, then, was direct infection of healthy tissue, for there was no communication between the bladder and the nodules in the skin. Whether cancer is communicable from one person to another is a different matter, but the question of the infection or contagion of cancer is, to my mind, a most important one. The care and elaboration displayed by Mr. Leaf in the preparation of his paper deserves much fuller discussion than the short time at our disposal this evening allows us.

Mr. FREDERICK LAWRANCE: With regard to cancer being hereditary, no doubt it is. Speaking to Sir James Paget on the subject some years ago, I said, "You used to teach that 'cancer was not hereditary'; but after watching many cases, and knowing the family history, I feel convinced it is so." He said, "You are quite right, I used to teach it, but it is hereditary, there is no doubt." Mr. Leaf spoke of it in his paper as being possibly infectious. I have long thought it may be infectious, in the instance of a wife taking it from a husband or *vice versâ*, when there is no history of cancer on the one side, or from bad smells. A few years ago I was attending a lady who died of carcinoma of the liver, during which time a lady in the adjoining house became ill, and remarked, "I am convinced I am ill from the bad smells coming down the chimney from the sick room." I did not think much of it at the time, but she developed cancer of the liver. A neighbour on the other side also had cancer of the stomach. Instances like these would make one think of the possibility of the disease being infectious.

Mr. CECIL LEAF: In reply to Dr. S. D. Clippingdale, I remarked I was much interested in what he had said. My own enquiries tended to support Havilland's views, for I had found in 30 per cent. of my cases of mammary cancer there was a well marked history of damp, and in more than 17 per cent. a history of residence near a river or canal, &c.

In reply to Mr. John G. Pardoe, I agreed with him in thinking that cancer was infective in the same person in the sense he had referred to. In my own series there was a history of a *possible* infection in 31 per cent. of cases, but I did not think there was much evidence to show that mammary cancer owed its origin to this cause. I thought much misconception arose from the terms "predisposing and actual causes," and it would be advisable if they could be dropped.

In reply to Mr. Lawrance, I said that in some of my cases there was a history of defective drainage, with resulting bad

smells, and that in 23 per cent. there was a marked family history of cancer. The latter fact, however, should not be taken as proving the hereditary transmission of cancer. In the majority of cases several causes were present, the commonest being errors of lactation, family history of consumption, injury, and worry.

Dr. ALEXANDER MORISON read a paper "On Boldness in the Treatment of Certain Phases of Pneumonia," for which see pp. 98.

Dr. G. A. SUTHERLAND: I agree with the general lines of treatment which Dr. Morison has put before us. As regards the reduction of the fever by artificial means, that seems to be desirable only when hyperpyrexia is present, or the patient is manifestly suffering from the pyrexia. In ordinary cases a temperature of 104° or even 105° is best left alone. The application of ice to the head is useful for various cerebral disturbances, as well as for pyrexia, but it should not be used continuously, as it tended to depress the whole system. I have found, like Dr. Morison, that strychnine is the most valuable cardiac tonic in pneumonia. The common mistake is to give it in insufficient doses, for in a toxic condition like pneumonia physiological effects are not easily produced. The drug should be pushed, preferably by subcutaneous injection, until the desired improvement is produced or until some twitching is observed. The value of venesection or leeching when cyanosis appeared during the pre-critical stage, is now generally recognised, and will probably be more generally practised in the future.

Dr. A. ELLIOT: I do not think I am quite in agreement with Dr. Morison on the question of the reduction of temperature in pneumonia. I gather that he advocates interference at or about 101°, and recommends the application of the ice-cap at that temperature. If we remember that the optimum temperature for the pneumococcus is blood-heat, and that it grows less readily as the temperature is raised above that point, and ceases altogether when 107° has been passed, it seems at least possible that by the active reduction of temperature in this disease we may be favouring the growth and development of the causal micro-organism. There will be no difference of opinion as to the proper line of treatment when high temperature, say 103·5° and over, is reached; but I do not think that moderate fever—102° or 103°—calls for energetic attempts at its reduction.

With regard to the methods of reducing temperature, I have found that the continuous application of cold, especially in the form of ice to the chest wall, is badly borne by many patients, and causes restlessness and discomfort in a certain number of

cases. Personally, I prefer sponging at more or less frequent intervals. Cold sponging is a severe measure, and is most disagreeable to many. Hot-water sponging—as hot as can be comfortably borne—is grateful and comforting; and if thoroughly carried out, and if the patient be lightly covered afterwards, will generally secure a distinct fall in temperature. The surface of the body after such sponging is pink, instead of the dull white that follows cold sponging, and this determination of blood to the surface leads to a progressive loss of heat, which continues for some time after the conclusion of the sponging. The question has been asked, How much blood is to be abstracted if venesection is carried out in a case of pneumonia. The amount, it seems to me, is of less importance than the rapidity of loss. The object aimed at is the relief of the right heart, and a more or less abrupt blood loss on the venous side is the chief desideratum. Ten ounces thus withdrawn will in many cases serve to restore, at all events for a time, the balance of the circulation, whereas a much larger loss escaping from the vein guttatim will be of little avail. It is important, therefore, in performing venesection for this purpose to select a large vein and to make a free opening into it.

Dr. OTTO GRÜNBAUM: I would join issue with those gentlemen who do not believe that any advantage is gained by reducing the temperature of patients suffering from pneumonia, unless hyperpyrexia is imminent. Recent work has shown that the opsonic value for pneumococcus of the serum of the patient is below normal during the pyrexial stage, and rapidly increases to above normal during the crisis. This seems to show that the increase in opsonic value bears a distinct relation to recovery.

The optimum temperature for phagocytosis of the pneumococcus by the white cell is 104° F., and therefore we are only justified in lowering the temperature, which deed reduces the resisting power of the patient, when positive and potent reasons present themselves.

Dr. E. A. SAUNDERS: It is with very great pleasure and interest that I have listened to Dr. Morison's most instructive paper. I find myself in entire agreement with him with regard to the very great value of strychnine hypodermically administered in cases of pneumonia accompanied by heart failure. It is, I am sure, of greater value here than digitalis, but I am personally convinced that the combination of strychnine with digitalis or digitalin is frequently of more value than either drug alone. In connection with Dr. Morison's extremely interesting paper a short time ago on the value of digitalis in disease of the heart, I should be much interested to hear his

views on the value of digitalis also in pneumonia. The reduction of the temperature, too, when it becomes excessively or continuously high, is also without doubt a point of extreme importance in the treatment of these cases. I do not, however, regard the application of ice to the chest of much value either for the control of the temperature or of the local inflammation within the chest, and I am inclined to regard this treatment, from the discomfort and restlessness to which it frequently gives rise, as an actual disadvantage. The application of ice to the head, however, in those cases in which the temperature remains high, when this is accompanied by delirium, I feel sure is frequently of very great benefit.

Dr. A. Morison, in reply, stated that he had abandoned the use of digitalis for strychnine in pneumonia, possibly on theoretical grounds, as he considered a depleted left ventricle unsuited for its use. He thought the title of his paper might be legitimately criticised. By "boldness" he meant a line of conduct which would be considered such by those whose practice had been influenced by the inactive school inaugurated by the late Professor Hughes Bennett, of Edinburgh, and others, his contemporaries. The boldness he advocated was chiefly in the direction of the continuous use of ice to the head, repeated and fairly large doses of strychnine, and venesection to 10 or 12 ozs. for cardiac failure when this was indicated. He agreed with Dr. Elliot that it was not so much the quantity of blood withdrawn as the rapidity with which it escaped, which relieved a surcharged right heart.

The Mirror of Practice.

CONGENITAL DISLOCATION OF THE HIP.

By C. B. KEETLEY, F.R.C.S.
Senior Surgeon to the West London Hospital.

THE skiagrams represent the hips of a little girl, aged 3, and the first was taken before the commencement of treatment. This indicates a well-marked and typical congenital dislocation of the left hip. The other was taken quite recently from the same patient, after the child had been cured by the Paci-Lorenz method. The original skiagrams are very beautiful, and are both by Dr. Harrison Low. The negatives are quite untouched. The child is a patient of Dr. Beavor Anderson, of Clapham, and the dislocation was reduced under chloroform on July 13 of last year. I divided the adductors by stretching them, and at the same time

Congenital Dislocation of the Hip.

By C. B. KEETLEY, F.R.C.S.

Fig. 1.

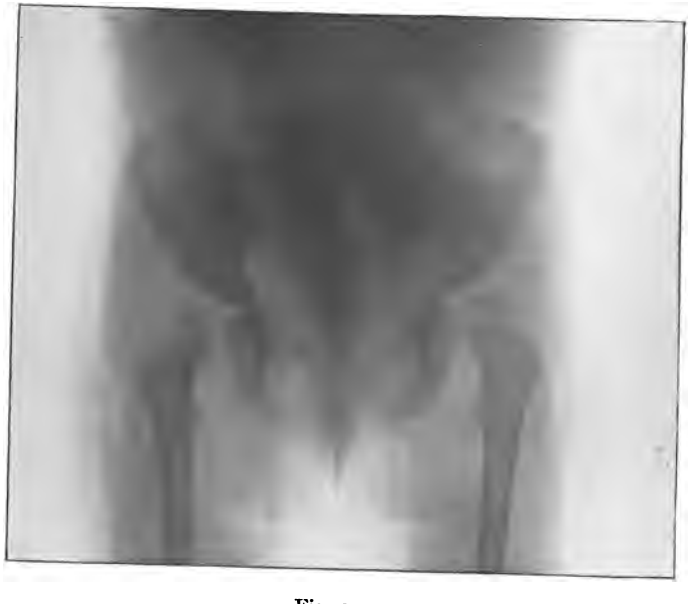

Fig. 2.

hammering the skin over them with the inner border of the surgeon's hand. The other structures round the hip-joint were stretched by, first, hyperflexion of the hip, and then hyperextension. These methods were introduced by Lorenz. As he, like Billroth, is a Viennese professor, I should think he got the idea of substituting this procedure for myotomy from remembering the method of hyperflexion of the hip which Billroth introduced as a substitute for stretching the sciatic nerve by means of a cutting operation. After I had had the hip well extended manually for about ten minutes, with a little manipulation on Paci's plan it quite easily slipped into the acetabulum, which it entered with a snap. The head of the femur could now be felt in the groin instead of in the buttock. In order to prevent any reluxation, the limb was flexed to a right angle and then adducted until it lay in the transverse plane of the body, that is to say, the patient lying upon her back, the thigh was at right angles with the trunk, and with its outer surface in contact with the table.

The child was fixed in this position with plaster of Paris bandages which extended upwards to the waist, and downwards to just above the knee. The upper part of the right thigh was also included. She was kept in plaster of Paris for about five months; she was then placed in a splint which I use for all kinds of hip troubles. This prevented any reluxation while the limb was being gradually accustomed to adduction.

She was accustomed to adduction in a week or two, and she now runs and walks about and, to an ordinary observer, appears to be quite normal. All the movements of the hip are present and free. The result may reasonably be regarded as perfect, although inspection of the skiagram will show that the femur which had been dislocated is not so well developed as its fellow. The mode of treatment by fixing in plaster of Paris in a frog-like position is also due to Lorenz.

The age of three is an ideal age for dealing with a congenital dislocation of the hip. When medical men in general can be got to recognise this, nearly all such cases as fall into competent hands will be reduced. After seven or eight, immediate forced reduction requires a degree of violence which is unjustifiably dangerous, not only to the bone, which is of less consequence, but to the great nerves, which is much more serious. Many accidents have occurred from attempting to apply this method to unsuitable cases, and also from attempting to do too much at one time with individual cases.

Older cases of congenital dislocations of the hip, although not suitable for the so-called Lorenz bloodless treatment, are

often well adapted for operative treatment. In some instances it suffices to open freely the capsule of the hip-joint, and then to bring the head of the femur forwards beneath the anterior inferior spine, and keep it there for several months in a position of strong abduction. But generally an artificial acetabulum has to be made in that situation, and, in making it, the ingenious instrument of Doyen is invaluable. Having sometimes found a difficulty in keeping the head of the femur in the new acetabulum, in December last, in the case of a boy, Alexander S., in West London Hospital Ward, I fixed it there with a stout silver wire passed through the trochanter, the neck of the femur, and then through the ileum, near the anterior superior spine. This was removed after five weeks. It proved so effective that I think I shall often repeat the plan, but it is not always necessary. I last month operated on a case with Dr. Phillip Seccombe, of West Drayton, and the head of the femur showed no tendency whatever to leave the new acetabulum. That, however, is unusual.

The above-named Alexander S. suffered from dislocation of both hips. While treating one by operation I occasionally manipulated and, in the intervals, extended the other (with a weight). Yesterday (March 7) I discovered that this femur had become transposed from the dorsum ilea to an excellent anterior position beneath the anterior inferior iliac spine.

Note.

I have said that three years of age is the best age for treating these cases. As a matter of fact, I have never had the opportunity of treating a case earlier myself, but if I had I should commence the practice of reducing the dislocation from the first, and occasionally repeat it. But I should not attempt to fix the improved position before near the end of the three years because, owing to the fatness of most young children, as well as their uncleanly habits, they are unfit to wear splints, and still more unfit to be put into plaster of Paris. The reason for commencing the practice of reduction at the earliest possible age is to limit the hour-glass contraction of the capsule, which nearly always takes place in such cases.

A CASE OF DOUBLE IRIDECTOMY FOR SUBACUTE GLAUCOMA FOLLOWING OVARIOTOMY.

By PERCY DUNN, F.R.C.S.
Ophthalmic Surgeon to the West London Hospital.

THE following case seems worthy of record by reason of the fact that it illustrates several points of interest.

On April 25, 1904, E. R., a single woman, aged 57, was admitted under Mr. Bidwell, complaining of swelling of the abdomen. Since October, 1903, she had noticed that her abdomen was swollen. In January, 1904, this swelling had become much larger; and, in addition, she was troubled with incontinence of urine. Beyond suffering from gastric ulcer and anæmia in former years, she had always enjoyed very good health. The menopause occurred at fifty. The heart and the lungs were healthy; the abdomen was distended in the lower part, while a rounded tumour could be felt rising out of the pelvis. It was dull to percussion, and extended about two inches above the umbilicus. A fluid thrill could be obtained. *Per vaginam* the uterus was movable. Bimanual examination showed that the tumour was fixed to the uterus, apparently on the right side. The urine was acid; specific gravity 1020. The following note has been kindly furnished by Mr. Bidwell.

"On April 28, 1904, Mr. Bidwell opened the abdomen by an incision 3 inches in length to the right of the linea alba. The abdomen contained a large cyst connected with the right ovary. The cyst was tapped and removed, after ligature of its pedicle. The left ovary was examined and found to be healthy, and so was not interfered with. The abdominal wall was closed by three layers of interrupted sutures. The patient made an uninterrupted recovery. The wound was dressed for the first time on May 7, when it was found to have healed; the stitches were accordingly removed."

I am indebted to my former house-surgeon, Mr. A. S. Millard, for the following notes:—

May 2: The patient was seen by Mr. Dunn to-day, as she has been complaining of pain and failing vision in her left eye. The left pupil was widely dilated, oval in shape, and immovable. The eyeball was somewhat injected. The tension was + 2. Sulphate of eserine drops and Chinosol fomentations were ordered every four hours.

May 3: Injection less and vision improved; can now make out the outline of the ward windows opposite, and can count fingers.

May 4: Improvement continuing.

May 8: Not so well.

May 9: A large upward iridectomy was done under chloroform. The section was made with a Graefe's knife.

May 10: The left eye was dressed, the conjunctival sac washed out with Chinosol lotion (1—4,000). No pain.

May 14: The sight in the right eye is becoming misty, and there is some pain.

May 15: The tension is now + 2, and the vision is worse.

May 16: The vision now amounts only to counting fingers close to the eye. A large upward iridectomy was done to-day, identical with that on the other eye.

May 25: Vision much improved in each eye. Both eyes doing well.

May 26: Vision very much better. The eyes have now recovered from the operation. Tension normal.

May 27: Patient discharged.

Remarks.—This case presents several points of interest to which attention may now be drawn. First, it was elicited on enquiry from the patient that four years previously she had been informed by an ophthalmic surgeon whom she consulted that she was suffering from chronic glaucoma in each eye. At that time she sought advice in consequence of failing vision, and the surgeon then warned her that subsequently it might be necessary to operate upon her eyes. The vision had still continued to fail slightly from that period up to the time of her admission, but never at any time had there been any pain or redness in the eyes. Then came the operation for ovariotomy, which, nevertheless, was quite uncomplicated, and from which she made an excellent recovery. On the fourth day, however, following the operation symptoms of subacute glaucoma developed in the left eye. Under the belief that the sudden increased tension was merely temporary, and would subside under treatment, hot fomentations and eserine drops were employed. For a time improvement resulted from this, but subsequently a large upward iridectomy was done. The precautionary measure was at the same time adopted of keeping the right pupil under the influence of eserine, but as the sequel showed, this proved to be quite unavailing, inasmuch as five days after the operation upon the left eye the right one became the seat of a subacute glaucomatous attack, for which, in the course of forty-eight hours, a large upward iridectomy was required. On testing the vision previously to the discharge of the patient, that in the right eye was found to be $\frac{6}{18}$ nearly; that in the left $\frac{6}{24}$.

A point of interest was the failure of the eserine drops to arrest the development of the attack in the right eye. Despite the fact that for some days the right pupil was kept

strongly contracted by means of the myotic, the glaucomatous attack nevertheless developed.

Again, what was the connection between the ovariotomy and the sudden onset of the subacute glaucomatous symptoms? Experience has amply taught that a close connection exists between inflammatory glaucoma and physical or mental shock. Either one or the other, singly or combined, is, or has been, present in the majority of cases of patients who are the subjects of the disease. On the other hand, what is the connection between glaucoma and shock? The answer to this involves the whole question, which has still to be determined, of what glaucoma is. In the simple or chronic form of the disease—that in which iridectomy, so invaluable in the treatment of acute cases, is apt to prove commonly more harmful than useful—the symptoms are so modified as scarcely to fulfil the description of a glaucomatous attack. Indeed, in many instances, save for two exceptions, the cardinal signs of glaucoma are absent; these exceptions being excavation of the disc and failure of vision. Thus there is much which can be said for Graefe's contention many years ago, that these cases of simple glaucoma should not be described as glaucoma at all, but as those of amblyopia associated with excavation of the disc. And yet we are compelled to remember that unless these cases are regarded as glaucomatous, inadvertent treatment may expose the patient to the risk of the supervention of total blindness; for should a mydriatic be casually instilled into an eye in which simple glaucoma is present, in a few hours afterwards an acute attack of the disease would probably be the result. Nothing, then, can show more clearly than such a catastrophe as this how little we know of the true etiology of that disease which is known as glaucoma.

Hospital Notes.

By A. Elliot, M.D.

Two Cases of Ruptured Duodenal Ulcer: Operation and Recovery.

Case 1.—W. W., aged 36, a cabman, was admitted to the West London Hospital about noon on Thursday, November 24, 1904, complaining of severe abdominal pain. He stated that he had been suddenly seized, while eating, two evenings before, with pain in the upper abdomen. He did not vomit. He was seen by a doctor who prescribed a draught, and advised him if he did not improve speedily to go without delay to a hospital. The pain soon passed off, and the patient had a good night and went to work on the following morning apparently perfectly well. At 8 p.m. on the same evening, while driving his cab, he suddenly vomited, and immediately hereafter was seized with an attack of pain in the same region as before, but shooting across to the right side. The vomiting occurred once only, the vomited matter consisting of undigested stomach contents, but no blood. The bowels were opened the same evening. A very bad night was passed; the pain continued and steadily became worse up to the time of his admission.

He had always been a healthy man except for indigestion, from which he had suffered for "ten years on and off," and for which he had from time to time sought medical advice. The chief symptom was pain after food, coming on from two and a half to three hours after eating, but never immediately, or indeed much sooner than the time mentioned, and lasting two to three hours. There had been frequent vomiting, which relieved the pain, and on three occasions blood had been vomited, first on Boxing Day, 1903, the second three weeks later, and the last six weeks before admission. The blood had always been dark brown like coffee-grounds, and in quantity about half a pint at a time. For about four days after attack of hæmatemesis the motions had been noted as black. Patient had also noticed that beef, cheese, pastry and the like always caused pain, so that he had been living lately on fish and milk diet.

On examination patient was found to be a sallow complexioned man, but looked fairly well, and was well nourished. No especial "facies" was present. Pulse 112, respirations 28, temperature 101°.

The abdomen was distended, rigid and tender, most so on

the right side. There was no marked dulness anywhere, except in the epigastric angle. Respirations was practically entirely costal. The liver dulness was not decreased, but there was free fluid in the abdomen. A few hours later, the liver dulness on light percussion had diminished by 1 inch.

Patient was taken to the theatre at 6 p.m. and anæsthetised with ether. Mr. Bidwell opened the abdomen above the umbilicus by a 4-inch vertical incision slightly to the right of the middle line. On opening the peritoneal cavity, milk-like fluid and gas escaped together with a caraway seed. The fluid was sponged out as far as possible, and a small perforation, one-twelfth of an inch in diameter, was then found on the anterior aspect of the first part of the duodenum, the perforation itself being situated in the floor of a large ulcer about three-quarters of an inch in diameter.

Attempts to close the perforation by Halsteds' mattress sutures failed, owing to the sutures cutting out, but this was successfully accomplished by a purse-string suture passed at a distance of about half an inch from the edge of the ulcer, a piece of the great omentum being then stitched over it.

The escaped gastric contents being limited to the right side of the abdominal cavity, a counter opening was then made in the right flank, and a drainage tube introduced; and a second tube was introduced and passed down into Douglas' pouch through another opening made in the middle line just above the pubes; finally, a gauze drain was inserted through the original incision leading down to the site of the perforation, the rest of the wound being closed by interrupted silkworm gut sutures. The wounds were then dressed and the patient put back to bed. Temperature 100·4°, pulse 112, respiration 20.

November 25: Patient passed a satisfactory night, and slept about two hours. Nutrient enemata were given every four hours, a pint of normal saline solution being given by rectum every twelve hours to relieve the thirst. The wounds were dressed, and the fluid which had collected in the pelvis was removed by aspiration with a fine tube and syringe.

November 26: Condition quite satisfactory, the wounds were again dressed, the gauze drain being removed and a new one inserted.

November 29: Fed by mouth for first time, 1 oz. of barley water and Valentine's meat juice being given hourly, the rectal feeding being continued as before.

December 2: Condition quite satisfactory, nutrient enemata are only given eight hourly.

December 5: Solids given by mouth for the first time, all the wounds are still discharging slightly.

December 7: Both tubes removed, the discharge from the

epigastric wound now consists of thin greenish pus, and is slightly increased in quantity.

December 11: Discharge from epigastric wound much increased, coming chiefly from a sinus running downwards and outwards under the left rectus muscle. Fomentations applied.

December 18: Discharge from sinus has greatly decreased, the other wounds are nearly healed. Patient is now on a fish diet.

January 9: Patient got up for the first time. All the wounds are now completely healed, his digestive system gives him no trouble whatever. He was discharged to go to a convalescent home on January 24.

(The notes of this case were contributed by Mr. E. F. Travers.)

Remarks by Mr. Bidwell.—The two points of greatest interest in this case are (1) the failure of medicine to cure a duodenal ulcer, and (2) the method of closing the perforation in an inaccessible position. I am of opinion that duodenal ulcer is practically seldom cured by medicine, and that it entails on the sufferer the danger of cicatrical contraction and subsequent dilatation of the stomach, as well as the more commonly fatal complications of hæmorrhage and perforation. Under these circumstances I am inclined to recommend operative treatment in every case where there is good reason to suspect the presence of a duodenal ulcer. Unfortunately the special symptoms are rather indefinite, the most constant signs being the occurring of pain two or three hours after food, and the absence of vomiting in the early stages. The symptoms are of very long duration.

With regard to the second point it is well nigh impossible to close a perforation of the stomach or duodenum by a row of Lembert's or Halsted's sutures, when the perforation is high up under the liver; in such a case the method I adopted of passing a purse-string suture at a distance from the circumference of the ulcer is the most efficacious. When sutures tend to cut out it is best to pass the suture through all the coats of the viscus, and then to cover over the scar with an omental graft.

Case 2.—J. C. B., male, aged 52, was admitted to the West London Hospital, under the care of Mr. Stephen Paget, on Sunday, December 11, 1904, complaining of severe abdominal pain. About noon on the previous day he had been suddenly seized, while at work as a watchman, with severe epigastric pain. He did not vomit and was able to walk to a neighbouring house where he was given brandy and water, which he said increased the pain. His own doctor saw him shortly afterwards and did not consider him fit to be moved home. Next

day he was able to be sent into hospital. He had suffered from "indigestion" for some two or three years, for which he had been intermittently under treatment. The chief symptoms were pain after food, flatulent distension and vomiting. The pain varied in its occurrence, coming on generally some two hours after eating, but sometimes at a much shorter interval, and occasionally during or immediately after a meal. Vomiting always relieved the pain. He had often gone without food because of the pain which he knew eating would induce. He had never had pain in the night, but sometimes felt discomfort in the epigastrium on getting up in the morning, and this had been relieved by taking his breakfast. For several days at a time he had been free from pain and imagined himself cured, but recurrence of the symptom had always followed sooner or later. Flatulence was "very bad" and practically constant. For a few weeks before admission he had vomited after nearly every meal. He had never vomited blood, fresh or altered, and so far as he knew there had never been melæna.

On admission his temperature was 97·5° and his pulse 116. The expression is described as "anxious"; he was sweating freely, and the respiration was rapid (46 to 50) and shallow, the alæ nasi acting strongly. The abdomen moved only slightly on respiration, and was distended, tender, and tympanitic. There was some resistance on palpation, especially in the upper abdomen. Liver dulness was absent in the nipple line. A perforative lesion was diagnosed, but the evidence did not seem to warrant a distinction between gastric and duodenal rupture. Median laparotomy was performed thirty hours after onset of symptoms. On opening the peritoneum, gas and turbid fluid escaped in large quantity, especially flowing from the right subphrenic region. The intestines were covered with lymph in parts, and recent adhesions existed between the omentum and the anterior abdominal wall. A small perforation, the size of a pea, was found in the duodenum at the junction of the first and second parts, which could be closed by Lembert's sutures. A counter opening was made in the right flank, through which a large drainage tube was introduced, a tube with a gauze wick was passed down to the neighbourhood of the perforation, and the pelvis was opened and drained. The peritoneal cavity was flushed out with saline solution, and the abdominal wound closed. At the close of the operation about 4 ounces of coffee-ground material was vomited.

For four days the temperature remained at or below normal. On the fifth day it began to rise and signs of pneumonia, with pleural effusion, appeared at the right base posteriorly. On

December 21 eighteen ounces of clear fluid were aspirated from the right pleura. A week later a subphrenic collection of pus was opened under chloroform, and the cavity flushed out and drained. Thereafter the temperature fell to normal, and remained so till January 11. On January 16 a small collection of pus in the subphrenic region was evacuated. The dulness at the right base persisted, but on January 17 an exploratory puncture failed to withdraw fluid. The subphrenic cavity still continued to discharge but in lessened quantity, and by the end of January the patient was able to sit up. This was followed by slight rise of the evening temperature and increase of discharge, which soon subsided, and by February 15 he was allowed out of doors. The temperature is now (March 3) normal, the discharge is much less, and the general and local conditions steadily improving, although there is still very feeble breath-sound over the lower half of the right lung. The patient is still in the hospital, awaiting a letter for admission to a Convalescent Home.

(For the notes of this case we are indebted to Mr. Warner Jones.)

Remarks by Mr. Paget: There is nothing that needs to be added save that the patient has lately (March 10—14) been again feverish, and the drainage of the subphrenic cavity is not quite satisfactory. Also, he has some albumen in the urine, and under the microscope a trace of blood. But I am inclined to leave him without further operative interference, believing that he will improve and heal well if he gets into better air.

Reviews and Notices of Books.

LATHOM ON PULMONARY CONSUMPTION.[1]

THIS is a practical book written by an author of great experience on the subject, and the rapid exhaustion of the first edition shows that it has met with the appreciation it deserves. The author lays great stress on the early recognition of the disease, maintaining that in this stage it is easily curable, and the grounds he gives for making a positive diagnosis in the early stages are excellent. They are as follows :—

A positive diagnosis should be given when (1) Tubercle bacilli are present in expectoration or section, provided that there is no source for these to be found in the air passages.

[1] "The Diagnosis and Modern Treatment of Pulmonary Consumption." By Arthur Lathom, M.A., M.D.Oxon., F.R.C.P.Lond. Second Edition, pp. 224. Price 5s. London : Baillière, Tindall & Cox.

(2) Hæmoptysis even to a very small extent is associated with suspicious signs or symptoms, provided that there is no evidence that the blood comes from the upper air passages.

(3) Diminished resonance and increased resistance is found associated with persistent crepitations in the apices of the lungs. Patients presenting any of these symptoms should be treated at once for pulmonary consumption, and the results, he maintains, will prove very satisfactory. There is a good chapter on the avoidance of infection and re-infection, which describes the most common causes, such as sputum, dust and the like, and the best means of diminishing the danger.

We are glad to see that the author does not share Koch's views that bovine tuberculosis cannot be transmitted to the human subject, as he states that "We are forced to conclude, in any case until we receive the final recommendations of the Royal Commissioners on the subject, that tubercle bacilli received from cow's milk and other animal substances may convey the infection to man," and that therefore it is imperative for us to take every precaution which may prevent healthy human beings from consuming food contaminated with tubercle bacilli. The principles and details of open air treatment as carried out in a sanatorium and private houses are fully explained and discussed, and chapters on other forms of treatment and treatment of special symptoms, make up a book replete with sound common sense and useful information.

An Appendix giving two easy methods of examination of the sputum for tubercle bacilli will prove useful.

FREDERICK JAMES GANT'S AUTOBIOGRAPHY.[2]

THE autobiography of a surgeon who was born so far back as 1825 might reasonably be expected to be full of interest, covering as it does a period in which such immense strides have been made in surgery and medicine. A persual of this book, however, will lead to disappointment, as there is little of any interest to be found in the volume—the greater part of which is taken up either by quotations from old speeches or lectures, or the prefaces of books written by the author.

FERNIE ON MEDICINAL MEALS.[3]

THIS volume is written in a popular style to engage the attention of the busy public. It cannot be called a strictly scientific work, since many statements contained therein are taken from old herbals and books on herb lore which were written in the 16th and 17th centuries, and which will not bear the scrutiny and examination of modern research. But the author himself says, "The leading motive of the work is to instruct readers, whether medical or lay, how to choose meats and drinks, which can afford. . . . the same remedial elements

[2] "Autobiography of Frederick James Gant, F.R.C.S." London: Baillière, Tindall & Cox. 1905.

[3] "Meals Medicinal." By W. T. Fernie, M.D. Bristol: John Wright & Co.

for effecting cures as. . . . drugs have hitherto been relied on to bring about." Here is our objection to this work. Let the author instruct the profession as much as he will and can. We are, as a profession, not so well versed in the culinary art as we should be, and possibly we commit as many errors of diet as "the man in the street." But to expect a layman who is in absolute ignorance of anatomy, and whose knowledge of physiology is almost *nil*, to cure himself of ailments, however trivial, by a study of Dr. Fernie's volume, is expecting too much.

If such a consummation were brought about we should have in the early future a race of nervous valetudinarians, who, refusing this or that article of diet because they "knew they had one or the other form of disease," would become nuisances to their friends and enemies to themselves. But Dr. Fernie's work is no exception to the many popular writings on diet of the present day, all of which err in thinking that the digestive apparatus is a machine which, although of the same pattern in all, is of the same power in every individual. This is a mistake. Medicine can never be an exact science; the mathematical sequence of "Rule of Three" can never be applied to our stomachs, even a rule of thumb, which the obstinate individual lays down for his own guidance, is liable to lead to disaster. Further, in ordering out dietaries we must remember that what is "one man's meat is another man's poison." In "Meals Medicinal," the opening chapter on alcohol is good and well worth reading. It reveals an amount of general information, as indeed does the whole book, which is our envy. Many authors, ancient, mediæval and modern are quoted in illustration of some point or in support of some statement. But after carefully perusing the volume we are left with the impression that whilst it may instruct us in regulating the foods of our patients it will certainly amuse us by many of its confident statements. This herb or that compound are boldly mentioned as cures for diseases for which modern medicine asserts there is either no cure, or for which specific remedies and sera are the only known methods of arresting.

Yet with all these imperfections "Meals Medicinal" is a book which we have read with amusement and some advantage and we can recommend its perusal to our professional brethren. The layman had better avoid it, and when in doubt about his stomach's performance, or when actually ill, he will be best advised in seeking the services of a skilled general practitioner whose knowledge to-day far exceeds that of any medical man who flourished, say, fifty years ago.

HUTCHINSON ON THE SURGICAL TREATMENT OF FACIAL NEURALGIA.[1]

THIS is an opportune work, for although cases of epileptiform neuralgia, involving the fifth cranial nerve, are fortunately not very frequent, yet when they do occur they are of so severe a character as to render the sufferer's existence a veritable misery. Very little good

[1] "The Surgical Treatment of Facial Neuralgia." By Jonathan Hutchinson, Jun., F.R.C.S., Surgeon to the London Hospital. Pp. 151. Illustrated. London: John Bale, Sons and Danielsson. 1905.

has come in the past from any of the peripheral surgical operations, but the removal of the Gasserian ganglion itself has had some most gratifying results. This little brochure deals mainly with the treatment of the affection, and does so in a masterly and exhaustive manner. The subject is a technical one, and yet the author has made his description of the disease and its operative treatment a matter of pleasant reading, and the work should be of considerable aid to the practitioner in advising his patient, and to the surgeon in carrying out the difficult manipulations needful for the treatment.

BARWELL ON LATERAL CURVATURE OF THE SPINE.[1]

THE author states that this, the sixth edition of his little work on the subject of spinal curvature, has been practically entirely rewritten, as compared with the former editions, and this particularly because, in and about 1890, he discovered certain facts which constitute the key to the problem of the lesion, and which form the rational basis to effective treatment. This advance he believes to have achieved by the detection of certain pelvic malpostures.

There seems, however, to be a lack of connected reasoning in the book, a want of systematic arrangement of the contents. There is also the annoying introduction of no less than eight appendices, the subject matter of which might well have been incorporated with the main body of the book.

One chapter is headed "Certain Prevalent Methods"; but surely this term as it stands means nothing. It is, however, an instance of some of the rather too frequent unpractical expressions made use of by the writer.

Further, because of the recent discovery which he avers he has made, there is a distinct loss of a broad view of the lesion under consideration. While admitting that his belief that a primary improper position of the pelvis has much to do with the secondary appearance of a scoliotic curve, it should not be held that this is the only one or the whole of the etiological factors at work. For the same reason, treatment is dealt with in much too narrow a manner. There are some points of great interest in the book, but on a close examination of it, it must be confessed that it is somewhat disappointing.

MACNAUGHTON JONES ON THE DISEASES OF WOMEN.[2]

THE success and popularity of this well-known work have been worthily gained, partly by reason of its essentially practical nature, partly no doubt by the profuseness of its illustrations. In the present

[1] "Lateral Curvature of the Spine and Pelvic Deviations." By Richard Barwell, F.R.C.S., Consulting Surgeon to Charing Cross Hospital. Sixth Edition. Pp. 103. 42 illustrations. London: Baillière, Tindall and Cox. 1905.

[2] "A Practical Manual of Diseases of Women and Uterine Therapeutics, for Students and Practitioners." By H. Macnaughton Jones, M.D., M.Ch. Ninth Edition. University Series. In two volumes. London: Baillière, Tindall and Cox. 1904.

edition the work has been revised and re-written throughout, by which the author has been able to add many improvements rendered possible by the clinical, operative and pathological advances which have been made in the subject during the last few years. Thus this manual has been brought into line with the most up-to-date details in connection therewith, and at the same time it embodies the results of the author's own matured and extended experience. In respect, therefore, to this new edition nothing more remains than to congratulate both author and publishers upon its production, and to reiterate our formerly expressed opinion of the excellence of the work.

WALSHAM'S CHANNELS OF INFECTION IN TUBERCULOSIS.[1]

THE Weber-Parkes prize for 1903, was awarded to this essay on "The Channels of Infection in Tuberculosis," together with the conditions, original or acquired, which render the different tissues vulnerable.

Dr. Walsham considers the channels of infection under five headings. (1) Hereditary transmission. (2) The lymphatic vessels. (3) The blood vessels. (4) Epithelial channels. (5) Inoculation nto the skin or tissues.

Infection by the lymphatic vessels is treated in considerable detail, and the author attributes tuberculosis of the bronchial glands mainly to infection through the normal intact epithelium of the trachea, bronchi or œsophagus, and he appears to attribute the origin of pulmonary tuberculosis, (other than miliary tuberculosis) mainly to infection of lung from the bronchial glands by contact. It is obvious that though such method of origin is undoubted in some cases, it is very far from being the case in all. Air-borne infection of alveoli is almost ignored, and the author makes no statement as to his opinion of the relative frequency of the various modes of infection of the lung. Further, the extremely interesting problem of the method of spread of the tubercle bacillus in the lung is dismissed in half a page.

One of the most interesting points established is the frequency of tonsillar tuberculosis. In 34 consecutive autopsies on cases of tuberculosis the author found by careful microscopical examination that the tonsils showed definite signs of tuberculosis in 20, but in only two of these did he consider the tonsil to be primarily affected.

The book is suggestive and interesting, though much of it is open to discussion, and many points are treated rather cursorily. The illustrations are very good and reflect great credit on the author's histological technique. The book is well printed on good paper.

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[1] "The Channels of Infection in Tuberculosis." By Hugh Walsham, M.D., F.R.C.P. Pp. 150, with 16 coloured plates. London: John Bale, Sons & Danielsson.

McKAY'S PREPARATION AND TREATMENT OF SECTION CASES.[1]

THIS volume contains over 640 pages, and is the most extensive work ever written on this subject. The book contains a large number of illustrations of operation rooms and of furniture, and much useful information with regard to the preparations to be made in private houses. On reading t, however, it cannot be denied that the book might have been very greatly reduced in size without losing any value. With regard to after treatment one cannot quite agree with all the author's directions, especially those with regard to feeding. He considers it a great concession to give a cup of tea on the morning of the third day, whereas it is the practice of the writer to allow a cup of tea the morning after a laparotomy. Another curious restriction is the absolute prohibition of vegetables until after the tenth day. This I think is a hardship to a convalescent, and is quite unnecessary.

A long chapter is devoted to the treatment of vomiting, but no mention is made of the very useful method of treatment by giving a tumblerful of water containing bicarbonate of soda.

The chapter referring to the management of the bowels is excellent, the author's routine practice being on the evening of the second day to give a capsule containing 3 grs. of calomel and 2 grs. of pulv. Elaterii co., and on the morning of the third day a turpentine enema is given. If this be not effectual, an enema containing sulphate of magnesia and quinine is given, and if this does not act, Epsom salts are given by the mouth. An enema containing 10 grs. of quinine dissolved in ½ oz. of whisky is recommended in cases of flatulence, and is well spoken of.

Another chapter is devoted to the appearances of the tongue, and great stress is laid on the shape of the end of the tongue. The worst shape being the pointed tongue, and when this is combined with a glazed appearance of the surface death may be expected.

Chapters are also devoted to the question ileus and pseudo-ileus, but there is little fresh to be noted in these subjects.

An interesting chapter deals with the recorded cases of foreign bodies left in the abdomen, and the number of cases which have been collected show how often this disaster has occurred.

One cannot take up the book without being interested, but few in these days will have time to read it through carefully. It will, however, remain as a valuable book of reference.

MAYO ROBSON ON CANCER AND ITS TREATMENT.[2]

THIS little brochure contains the lecture recently delivered before the Royal College of Surgeons together with some interesting appendices. Among the more important points in the lecture are the references to the infectivity of cancer, and instances are given of the

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[1] "The Preparation and After-Treatment of Section Cases." By A. J. Stewart McKay, M.B., M.Ch., B.Sc. London: Baillière, Tindall and Cox.

[2] "Cancer and its Treatment. The Bradshaw Lecture by A. W. Mayo Robson, F.R.C.S. London: Baillière, Tindall & Cox.

transmission of the disease from animal to animal and from man to man, and from one part of man to another. With regard to treatment, besides advocating radical operation in any case where the disease is declared, the author insists most strongly on the preventive treatment of the disease by the removal of all sources of irritation, and by the removal of parts which are liable to become cancerous, such as congenital moles, chronically inflamed breasts in middle-aged women, and tongues affected with leukoplakia, &c., &c.

He also urges the value of palliative operations in incurable cases, such as the operation of gastro-jejunostomy in cases of cancer of the stomach.

An interesting appendix contains a statistical study of all the cases of carcinoma of the breast admitted into the Johns Hopkins Hospital, from the opening of the Hospital in June, 1899, to June, 1902.

ST. THOMAS'S HOSPITAL REPORTS.[1]

THIS book represents the work done at the Hospital in 1903, and is made up of the medical and surgical reports dealt with by Dr. E. A. Sales and Mr. Cyril A. R. Witch respectively, together with the reports of the various special departments.

Papers on "A Case of Acute Polio-Encephalitis"; "Volvulus of the Cæcum"; "Two Cases of Acute Strangulation of Small Intestine," and "Experiences with Bone-plugging" together with recent additions to the museum, complete an interesting volume.

ST. BARTHOLOMEW'S HOSPITAL REPORTS.[2]

WE have received the Reports of St. Bartholomew's Hospital for 1904, and as usual these are full of interest. There is an article by Sir Dyce Duckworth on "Diseases which may Present Misleading or Seemingly Unimportant Symptoms," which is well worth reading. Another by Dr. B. C. Garratt on the "Early Sequelæ of severe faucial Diphtheria and their treatment," is also of importance. In it he points out the importance of the severe vomiting which may appear about the end of the first or during the second week, and is usually a precursor to some form of paresis. He shows how recent researches have proved this to be due to the action of the diphtheria toxin on the grey matter of the central nervous system, and particularly on the motor nuclei, and suggests that it should be treated by means of careful feeding with the stomach tube and large doses of belladonna and bromide, but not strychnia or alcohol. Other articles of interest are included, and the remaining part of the volume is made up of a description of the specimens added to the museum, the proceedings of the Abernethian Society, the summary of scholarships and prizes, and the medical and surgical reports of the cases treated in the hospital.

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[1] *St. Thomas's Hospital Reports.* New Series. Edited by Dr. H. P. Hawkins and Mr. W. H. Battle, F.R.C.S. Vol. XXXII. London: J. and A. Churchill. 1904.

[2] *St. Bartholomew's Hospital Reports.* Edited by A. G. Garrod, M.D., and Mr. McAdam Eccles, M.S., F.R.C.S. Vol. XL. London: Smith, Elder & Co. 1905.

THE LIBRARY REPORT.

WITH a view to attracting the attention of Members to the utility of the Library and to increased interest therein, a small exhibition of recent works has been on view in the Post-Graduate College at the meetings of the Society, the books being amongst those recently acquired through Review or by loan from Messrs. Lewis. The result has been satisfactory on the two occasions it has been adopted, and some Members expressed themselves as unaware that the Library was so up-to-date. It may be noted that at the last meeting were several of the most recent works on Medical Electricity and Skiagraphy, proving the popularity and advance of this branch of medicine.

Any books exhibited can be borrowed by subscribers on the following or any subsequent day, but cannot be taken away on the evening of the meeting.

HERBERT W. CHAMBERS,
March, 1905. *Hon. Librarian.*

SUPPLEMENTARY LIST OF MEMBERS SUBSCRIBING TO LIBRARY:—

Dr. A. Baldock.
,, C. Buttar.
,, H. E. Crook.
,, B. Dick.
Mr. C. H. Leaf
Dr. D. Pike.
,, G. Smith.
,, L. A. Walker.

NOTICE.

The Librarian would be pleased to receive from any member the following copies of the Society's Journal, which are missing from the complete record in the Library:—The Journal for the year 1897, 1899, 1902, 1903.

BOOKS RECEIVED.

The Diagnosis and Modern Treatment of Pulmonary Consumption. By Arthur Lathom, M.A., M.D.Oxon., F.R.C.P.Lond. Second Edition.

St. Thomas's Hospital Reports, vol. xxxii.

St. Bartholomew's Hospital Reports, vol. xl.

Autobiography of Frederick James Gant, F.R.C.S.

Lectures on Diseases of the Stomach and Intestines. By Boardman Reed, M.D.

Meals Medicinal. By W. T. Fernie, M.D.

The Surgical Treatment of Facial Neuralgia. By Jonathan Hutchinson, Jun., F.R.C.S.

Lateral Curvature of the Spine and Pelvic Deviations. By Richard Barwell, F.R.C.S.

A Practical Manual of Diseases of Women and Uterine Therapeutics for Students and Practitioners. By H. Macnaughton Jones, M.D., M.Ch.

The Channels of Infection in Tuberculosis. By Hugh Walsham, M.D., F.R.C.P.

The Preparation and After-Treatment of Section Cases. By A. J. Stewart McKay, M.B., M.Ch., B.Sc.

Cancer and its Treatment. By A. W. Mayo Robson, F.R.C.S.

THE POST-GRADUATE COLLEGE.

By the Dean.

The Second Winter Session commenced on Monday, January 16. During the past three months seventy-two Post-graduates have attended the College, in addition to sixty-seven life members. Amongst these have been ten officers of the Naval Medical Service, seven in the Royal Army Medical Corps, and eight in the Indian Medical Service. In addition to these there have been twelve doctors from the Colonies and abroad.

Special classes have been held in the following subjects: Throat and Ear Diseases (3), Ophthalmology (3), Intestinal Anastomoses (2), Practical Administration of Anæsthetics (2), Skiagraphy (2), Gynæcology (2), Operative Surgery (5), Bacteriology (2), Clinical Examination of Blood and Urine (2), Surface Anatomy (1), Tutorial Medicine (3), Tutorial Surgery (2).

We have to congratulate Mr. A. F. Hamilton, F.R.C.S., on his obtaining a commission in the Indian Medical Service. He came out top and obtained over 300 marks more than the next on the list. We also have to congratulate Messrs. R. G. Meredith and P. Power on obtaining commissions in the Royal Army Medical Corps.

Owing to the increase in the number of Post-graduates another lavatory was necessary, and a new one has been fitted up with hot and cold water.

Notwithstanding the increase in the fees for the Hospital Practice, the number of new entries this session is in excess of the corresponding session last year.

The following is a list of Post-graduates who have attended the practice of the West London Hospital during the last three months. An asterisk is placed against the names of those who are Life Members.

*L. H. Armstrong (Ripon).
*D. Arthur (Shepherd's Bush).
*G. Arthur (West Ealing).
T. W. Atkins (Shepherd's Bush).
H. J. Augustine (Burma).
*A. Baldock (Earl's Court).
*W. E. Barton (Streatham).
*G. J. Bagram (Bayswater).
A. Geo. Beale (Kensal Rise).
S. H. Belfrage (London).
Capt. V. B. Bennett, I.M.S.
*Dep. Ins.-Gen. R. Bentham, R.N.
Capt. R. J. Blackham, R.A.M.C.
Lt.-Col. A. T. Bown, I.M.S.
Fleet-Surgeon C. Bradley, R.N.
Staff-Surgeon F. Bradshaw, R.N.
*R. D. Brinton (South Kensington).
John Brunt (Hammersmith).
F. C. Bryan (Bayswater).
*H. F. Browne (Langham Street).
*W. M. Burgess (Harlesden).
J. E. Butler (Boston, U.S.A.).
*M. G. Cadell (Bayswater).
Staff-Surgeon J. A. Campbell, R.N.
*Capt. Carmody, R.A.M.C. (ret.).
*Major E. R. W. Carroll, I.M.S.
*H. W. Chambers, Hon. Life Member (Shepherd's Bush).
*Lt.-Col. Clutterbuck (Bayswater).
Frank Coleman (Harley Street).
*E. J. Coulson (Earl's Court).
H. Evelyn Crook (Earl's Court).
A. D. Cowburn (Earl's Court).
Capt. W. S. Crosthwait, R.A.M.C.
*J. S. Curgenven (Bayswater).
Lt.-Col. S. H. Dantra, I.M.S. (ret.).
G. G. Davidson (West Kensington).
F. S. Dawe (Chiswick).
W. H. Densham (New Malden).
*L. Dobson (Kensington).
W. Barclay Dick (West Ealing).
Archd. Donald (Cairo).
C. W. Emlyn (Bayswater).
*A. St. Aubyn Farrer (Paddington).
Geo. Fergusin (Paisley)
Major G. H. Fink, I.M.S. (ret.).
*H. W. Fitzmaurice (Dunmanway).
*Fleet-Surgeon A. M. French, R.N. (ret.).
W. E. Fry (Hammersmith).
F. Gans (Austria).
*H. M. Gay (Southampton).
*D. Gault (New Zealand).
J. H. Gibbs (Edinburgh).
Edmund Gonin (Burstow).
*A. J. Grant (West Kensington).
*W. Grantham-Hill (Chiswick).
Major F. J. Greig, R.A.M.C.
Fleet-Surgeon H. J. Haddon, R.N.
*C. H. Haines (Kensington).
*C. S. Hancock (Leytonstone).
*W. Allen Harmer (Tonbridge).
*A. Harrison (Yeovil).
*N. Heard (Chiswick).
E. W. Hedley (London).
P. Hefferman (Clonmel).
*W. C. James (Kensington).
*Capt. Johnston, R.A.M.C. (ret.).
Major T. P. Jones, R.A.M.C.
H. Noble Joynt (Fiji).
*R. A. Kirby (Westminster).
*W. B. Kirkaldy (West Kensington).
M. P. Kerrawalla (Bombay).
A. T. Latchmore (Sierra Leone).
*T. M. Legge (Temple).
*T. Ligertwood (Chelsea).
C. A. Lees (West Ealing).
Major B. W. Longhurst, R.A.M.C.
*J. Lynes (Kensington).
*A. Barclay Lyon (Hammersmith).
*Norman Macdonald (Harlesden).
*G. Maguire (Kew).
*W. Hooper Masters (Barnes).
*E. D. Macdougall (Walton-on-Thames).
*J. B. Mackay (Isle of Wight).
D. Macdougall (Dover).
*H. McNickle (Vauxhall).
Staff-Surgeon Marriott, R.N.
*D. F. Maunsell (South Kensington).
H. T. Merrick (Surbiton).
Major G. T. Mould, I.M.S.
*B. W. Mudd (St. Pancras).
W. Nolan (Bayswater).
*W. Norbury (London).
*R. W. Olver (New South Wales).
*H. M. Page (Kensington).
H. Compton Parsons (Willesden Green).
W. Kelley-Patterson (Ballyedmond Castle).
W. Harland Peake (Hampstead).
*A. F. Penny (Chelsea).
*R. D. Pollock (Acton).
Douglas R. Pike (Kensington).
T. J. Perkins (Dublin).
E. A. Purcell (Wimbledon).
*A. Renny (Southampton).
*A. H. Rideal (Twickenham).
W. F. Ridgway (Atlantic City, N. Jersey).
Arthur Riley (Winton, N.Z.).
*Patrick Robertson (Canada).
*A. Tait Robinson (London).
Major W. H. B. Robinson, I.M.S.
*Neil Robson (Edinburgh).
*F. E. Rock (Hammersmith).

Staff-Surgeon M. L. B. Rodd, R.N.
W. F. Roe (Old St., E.C.).
*T. Mackay Ross (Fulham).
*Lt.-Col. Silcock, I.M.S.
*G. A. Garry Simpson (Acton).
*A. Ross Sinclair (Parson's Green).
*W. Slater (Epping).
Capt. C. Seaver Smith, R.A.M.C.
*H. H. Sturge (Maida Vale).
Capt. Jno. Stephenson, I.M.S.
Chas. Stiebel (West London Hospital).
*E. Swain (Hampton Hill).
C. B. F. Tivy (Black Rock, Co. Cork).
F. C. Tothill (Staines).
W. R. Tomlinson (Moree, N.S.W.).
Alex. Urquhart (Shepperton).
*L. A. Walker (Notting Hill).
*H. W. Walter (Brentford).
F. H. Weekes (Bayswater).
Fleet-Surgeon A. Gascoigne Wildey, R.N.
C. H. Wilkinson (Canon City, Colorado).
*J. Rutter Williamson (Putney).
F. C. Willmot (Cape Town).
Frank Woore (Kensington).
A. P. Woodeforde (Shepherd's Bush).
Major W. H. E. Woodwright, I.M.S.
Oswald Wraith (Darwen).

March 8, 1905.

DEAN.

NOTES ON HEALTH RESORTS, SANATORIA, &c.

MALVERN.

NEARLY every watering place has its individuality, but we doubt whether there is another health resort in or outside this country which more deserves the term "unique" than Malvern. It rises from the ten mile wide alluvial plain of the Vale of Severn, almost as abrupt and as massive as Table

Mountain or the Rock of Gibraltar. It consists of igneous rocks, well clothed in verdure, their summits 1,300 feet above the plain, but made easily accessible by innumerable zigzag and winding paths, as dry and well kept as those in Hyde Park. The town or village of Great Malvern is built on a

steep slope about 400 or 500 feet up, just at the foot of the more perpendicular part of the Hills. Although it is on the east side, easterly winds seem to be blocked before they actually reach it, and from the west side the Welsh Mountains are separated by hills, woods and the valley of the Wye. It follows necessarily from these characters that the air is at once fresh and gentle, the water delightfully pure and soft, and the views superb.

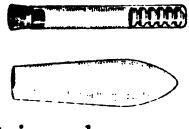
Malvern has always been famous for its hydropathic establishments. That of Dr. Gully, the father of the present speaker of the House of Commons, was turned into a hotel, but at present there exists the admirable establishment of Dr. Fergusson. This is a genuine institution for the sick and convalescent, and not a mere holiday place for the amusement of people from the large Midland towns. It has excellent baths, a complete and up-to-date electrical installation, and its good cooking, sensible dietary, cleanliness and refinement could scarcely be surpassed.

At Malvern the hills are mountains in miniature, and among them ladies and men who, for want of time or energy, or from other causes, do not care to go far afield, can get the health-giving and youth-renewing effects usually associated with a holiday in Switzerland or Norway, and these without a long and exhausting railway or steamer journey, and without also the risk of being injured by unsuitable food. It would be worth anyone's while to visit Malvern this Easter, either for health or recreation. There are good golf links with a separate course for ladies.

We can thoroughly recommend this establishment from knowledge gained by personal inspection during a visit there.

NOTES ON NEW PREPARATIONS, &c.

Messrs. Burroughs, Wellcome and Co.—This firm has forwarded for our inspection samples of their product "Hemisine" in the form of soloids, and their special shape of suppository, to which they have given the name of "Enule."



The "Enules" contain a dose equal to sixteen minims of the 1—1,000 solution of the drug, and should be found of service in certain rectal conditions.

The soloids can be obtained in a variety of doses.

Tabloid "Hemisine"	0·0003 gramme.
,, Ophthalmic (CC) "Hemisine".	0·0006 ,,
Soloid "Hemisine"	0·005 ,,
,, ,, ...	0·0012 ,,
Enule "Hemisine"	0·001 ,,

The Manhu Food Company.—During 1904 we gave a short notice in these columns to the products of this firm. We now have pleasure in bringing before our readers some clinical evidence of the value of these foods in the treatment of glycosuria, which has been placed at our disposal by the courtesy of Dr. R. R. Law, M.D.Cantab., whose report is appended:—

"Seeing a report on the Manhu Diabetic Foods in your Journal for July, 1904, and having already tried this food successfully in one case, I determined to try it again should opportunity present. I have now given it a thorough trial in three cases, with successful results in two cases and great amelioration in the third case.

"It is claimed for this food that the starch is still retained, but altered in such a way that it is not excreted as glucose by the kidney, but is presumably otherwise dealt with in the body, and this contention seems to be borne out by results in the few cases which have come under my notice. Possibly my very favourable though limited experience of this food may induce others with larger opportunities to give this food a trial.

"I may say that the food is well liked by patients and they do not tire of it as they are apt to tire of pure gluten foods. There is also a considerable variety of Manhu foods to choose from, and the price appears to be moderate.

"CASE 1.—Obese male, aged 42; complained of general pruritus and muscular weakness; found to be passing 1½ ozs. of sugar in twenty-four hours; was kept on Manhu food and dietary for three months; complete disappearance of sugar in course of one month with great improvement in strength and diminution of obesity. At end of three months patient was gradually restored to ordinary diet, and though watched for six months, no recurrence of glycosuria.

"CASE 2.—Obese male, aged 72. First seen two months ago. History of polyuria and dry mouth for a previous twelve months. Total excretion of sugar in twenty-four hours found to be 10 oz. Treatment given was Manhu food and dietary, and antiseptics by the mouth. At the end of one month's treatment sugar had entirely disappeared. Dietary continued, but antiseptic stopped. No reappearance of sugar.

"CASE 3.—Male, aged 62; first seen six months ago, said

to have suffered from diabetes for two years, had also had right hemiplegia, from which, however, he had recovered sufficiently to walk. There was marked insomnia in this case with some degree of dementia and noisiness.

"Total excretion of sugar in twenty-four hours was 8 oz.

"Treatment was Manhu food and dietary, and antiseptics by the mouth.

"At the end of six months' treatment the total average excretion in twenty-four hours is 4 oz. of sugar; the patient sleeps well, is mentally much clearer and is never noisy.

"In addition to the above I have another patient, aged 63, who began the Manhu food and dietary a fortnight ago, and already shows great improvement. I do not attribute the results in the above cases in any special degree to the antiseptics given, but rather to thedietary. In the second case acid boric grs. xv. *ter die*, was given for a fortnight, and sod. sulpho-carbol grs. xx. *ter die* for another fortnight In the third case, for five days in each week the patient takes in alternate weeks, acid boric and sod. sulpho-carbol in the same doses as above."

The above report makes it evident that the Manhu foods unquestionably are of service in glycosuria. We may add that their price is reasonable, their appearance good, and they are not repulsive to the taste, the last being by no means their least claim to favour.

We are glad to note that Mr. Hodgkinson, who is now the sole proprietor of the "Electro-neurotone," has concentrated all the branches of his business at 186, Goldhawk Road, W. Readers of the Journal will remember this ingenious apparatus shown at former exhibitions held by the society.

NOTES AND NEWS.

Some doubts were expressed before the Annual Dinner, that the change of venue was not a wise one, but that was speedily put to rest at the meeting itself, which turned out to be the largest one which we have had, 120 members being present, and even this number would have been largely increased had not another important dinner been held the same evening. The management reflected the greatest credit on the Honorary Secretaries; the menu was a good one, and the speeches not too long, and altogether a very enjoyable evening was spent.

THE Cavendish Lecture will be delivered by Dr. James Goodhart, M.D., F.R.C.P., LL.D. Aberd., at the Town Hall, Hammersmith, on Friday, June 23. The lecture will be followed as usual by a conversazione, at which there will be the usual exhibition of surgical and medical appliances and drugs.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 71, Holland Park Avenue, W.; those concerning business matters, advertisements, non-delivery of the Journal, &c., should be addressed to the Editorial Secretary, 77, Wimpole Street, W.

Authors desiring reprints of their articles published in the *West London Medical Journal*, are requested to communicate with the Editorial Secretary, 77, Wimpole Street, W. Reprints can be obtained at the following prices, if ordered before the publication of the Journal:—

	pp. 1-4	pp. 4-8	pp. 8-16
50 copies	6/-	9/-	12/6
100 copies	7/6	12/-	16/-
200 copies	10/6	16/-	25/-

Special rates are quoted for longer reprints.

We again wish to remind members that our columns are always open to them if they will forward to us papers which may be published as original communications, or interesting cases for the "Mirror of Practice." General practitioners, as well as specialists, are constantly meeting with cases of exceptional interest to all of us, and we shall always be pleased to publish them, if they will send them at least a month before publication.

OWING to pressure on our columns, the reviews of several books, and other contributions are unavoidably held over.

THE

West London Medical Journal.

Published Quarterly under the auspices of the West London Medico-Chirurgical Society.

Original Communications.

THE CAVENDISH LECTURE ON DISEASE OF THE HEART.[1]

By JAMES F. GOODHART, M.D., LL.D., F.R.C.P.

Consulting Physician to Guy's Hospital and to the Evelina Hospital for Children.

SIR,—Destitute as I was when I received the invitation of your Council of any idea of a subject in which to interest you for an hour to-night, I turned to the titles of some of the former lectures, and from them I gathered that all had been strictly clinical in their material and scope, and so I determined mine should be.

The one that I have selected, "disease of the heart," seems rather a large order, as your Secretary remarked, for a short hour, but I may at once relieve your minds by saying this is entirely due to a struggle with my title in which I was mastered, and my purpose would, I think, be better expressed if, without prejudice, I might be allowed to put it in conundrum fashion. When is disease *not* disease?

With this aim I shall have to speak of such commonplace subjects as the meaning of what are called functional murmurs, of the position and its indications, of the impulse; of præcordial dulness; of such departures from the normal

[1] Delivered before the Society on Friday, June 23, 1905.

action as intermission, palpitation, tachycardia, bradycardia, and the bearing of some of these on the diagnosis and treatment of actual disease.

My subject having shaped itself upon my desire to be on common ground with every one of you, I have confined myself almost exclusively to my own observations. I suppose I can hardly be accused of egotism, if I assume that I should not have been asked to address a body of experienced men, such as are here to-night, if it had not been thought that the decades that bring me in sight of artificial teeth and gout waters, face massage, and other devices for postponing age, bring also a right to an opinion of my own, and that it is the opinion you want to hear. I am but retelling a well-worn story that others have better told before, but from time to time it needs retelling, particularly if the opinions are independently your own.

And first, those murmurs with which I shall concern myself are all systolic. Many are basal, and of these, some are over the aortic valves, but more over the pulmonary, and extending over the right ventricle and towards the apex. Some are loudest in the mitral area, and when so they have a tendency, like the basal murmurs, to diffuse themselves, in this case upwards, round the nipple, to join the basal one, and the two often existing together, the one merges into the other and it is difficult indeed to say if there be one murmur or two. Very often, however, there is a purely apical murmur, which is heard in a series of separate whiffs, or is intensified in whiffs. And these are clearly associated with inspiration. Two or three come in each inspiration, as it rises to its acme, and then cease again, and these may be quite well heard round at the angle of the scapula. They are most marked when the patient is nervous under examination, and the heart more or less quickened. The murmur most probably *disappears* as the heart quiets down, and in all cases it is then much diminished. Under similar circumstances there often occur impurities of sound rather than definite murmurs; the first sound loses its cleanness, and is converted into a murmurous or humming, or groaning or grunting prolongation, this being confined almost exclusively to the position of the impulse.

Lastly—and perhaps most common of all—there is another

murmur, or the same murmur under a different aspect, again systolic and apical, and curving round it upwards towards the base, and which has this peculiarity, that it is only brought out by making the patient lie down. The heart sounds, when examined with the patient standing or even sitting, are absolutely healthy, but put the patient on a couch, and a more or less well-marked, often quite loud, systolic souffle, like that of mitral regurgitation, is developed round the apex. If a somewhat prolonged observation is made it will be found that the murmur varies considerably in intensity at different beats, and tends, on the whole, to disappear, after the position assumed has been maintained for some few seconds, or perhaps as much as a minute or two. Much more rarely I have heard a bruit develop when the patient rises, though there has been none when the body was recumbent. Foxwell speaks of this murmur as "the pulmonary murmur," and considers its position to be over the second and third left intercostal spaces. He alludes fully to this characteristic feature of production in the recumbent posture, and explains it by stretching of the pulmonary artery under conditions of debility, and he has even known it to develop after the occurrence of heart strain.

If you make a practice of examining the heart of every one that you see for the first time—no matter what the complaint—both standing up and lying down, I am quite sure the frequency with which you will find this systolic murmur, or these systolic murmurs, will surprise you; they are as common as movable kidneys.

These are the chief varieties of what are called "functional" murmurs. I would not say that they are all that occur. They are well known to any one who has any sufficient opportunities for observation. What, however, is, I think, not even yet so well known as it ought to be, or allowed for in daily practice, is the *frequency* with which they occur even in healthy subjects, unless mere temporary nervous excitement be judged to be ill-health, and this *variability* in *form* both between one case and another, and in the one case also, between one moment and another. Their genesis has been discussed repeatedly, and still forms a tempting bait in this respect.

Functional murmurs have ever been supposed to convey

the indication that, at any rate, there is something wrong, and mostly a blood change to be removed by the administration of iron. At one time or another the site of production has been supposed to be now the aorta, now pulmonary artery; now the mitral or tricuspid valve; now outside the heart altogether. And he would be a bold man and a very beater of the air who would waste your time by attempting to combat any one of these assertions. At any rate, I feel sure that each is true for appropriate cases, but I am concerned to insist that a proportion of them are produced at the mitral orifice; that any one of them may occur in man, woman, boy or girl, examined it may be casually, and in whom there need be no sign of any disease, or even of disturbance of the action of the heart. I would add, as not unimportant to my position, that no one of them disappears in any permanent fashion by any means so readily as is, perhaps, tacitly implied rather than positively asserted.

Now it seems fair to argue that being so often discovered haphazard, and associated, as they often are, with no symptoms, and being often called into being by a simple change of position of the body, they cannot be, at rate in many cases, of firstrate importance, and I would venture to change the name of many of them from the old one of "functional" to that of "postural" murmurs.

Yet such cases are often rejected at life offices; they are refused for the public services; they come from all quarters committed to the existence of organic heart disease. So common, indeed, are such cases that it is impossible to give even a summary of them, but I will single out a few that have specially interested me or have come across my path while I have been preparing this lecture.

A common case is such as this: A tall, overgrown, nervous youth with a pulse of 104 under examination. The dulness is decidedly ample over the left side of the chest inside the nipple, and there is a diffused forcible impulse spread all over the second, third, fourth and fifth spaces, between the sternum and the left nipple. On auscultation there is a loud systolic murmur over the pulmonary valves, a thick second sound, and at the apex a loud systolic murmur that comes in whiffs as the inspiration rises and disappears absolutely as it wanes. What could sound worse than this description, and

the case can easily look grave to the examiner, but the signs need all to be seen with the individual as a background, and then they are clearly of much less importance. Deduct the nervous excitement and the long narrow chest that cramps the lungs and brings the boy's heart unusually to the fore, and then the character of the murmur points to the reasonable probability that the heart is a sound one.

Another case that interested me much at the time was that of a young man, aged 22, who, having passed into the Woods and Forests three years before, was rejected at a final medical examination because he had disease of his heart. He was sent to me by Mr. Giffard, of Egham, because he could not find anything wrong. I examined his heart in all positions, and am sure it was absolutely healthy. I was so convinced that the man must have been nervous under examination and that a mistake had been made, that I wrote to the Under-Secretary of State, and he very kindly acceded at once to my request for a re-examination, but the Board adhered to its original opinion, and the candidate was again rejected on the ground that he had a valvular murmur that rendered him unfit for service in India. He had never had any trouble with his heart before, nor has he had any since, for I heard of him not long ago, and I am quite sure there was never anything more than the temporary murmur due to neuro-muscular excitement, and I hold that a young man's prospects were unnecessarily placed in jeopardy by reason of ignorance of the character of this murmur.

A boy, aged 9, whose father I had seen some years ago as he was dying of cerebral embolism after infective endocarditis, had pneumonia in March, 1904. It was slight, and it quite cleared up, but his medical attendant at school writes to the doctor at home: "There remains a rather interesting condition of heart, or, what I think is quite possible and more probable, a heart condition that was there before the pneumonia. I find that when lying down the apex beat is outside the nipple line, a distinct murmur can be heard and the pulse is 80 and irregular. When standing up the apex beat is just inside the nipple line. I cannot hear a murmur and the pulse is 108 and regular. I found that these conditions altered directly he altered his position, and however many times one tested." The writer attributes the whole

condition to latent rheumatism, as the boy had often had pains in his legs and arms, and he adds that he had seen similar cases before. Very sagaciously, however, he did not commit himself in any way to the mother of the boy, but passed on his impressions to the home doctor for further observation, whose subsequent remarks are equally pertinent. He notes that "when lying down the irregularity of action, as well as the loudness of the murmur, altered when the boy held his breath for a few seconds, the action being much steadier and the murmur less marked. There is nothing abnormal discoverable when he is standing up, even after exertion, such as running round the room twice. The beat is in the normal position and the action quite steady." "The interesting question is," says the doctor, "as to this being a temporary condition which the boy will grow out of; he has grown very rapidly of late. I have advised the mother not to allow the boy to cycle or undergo any severe exertion as long as there is a doubt if the condition be permanent or temporary, it being as well to be on the safe side." Advice, I may add, lest it should seem to any to be in excess of my demand, that I thoroughly endorse.[1]

Here is another case that is more doubtful, and I give it especially because it is so, for I by no means wish to convey that all of them are free from difficulty. Many want watching, and hasty opinions are always bad practice. A youth, aged 16, in whom a murmur had been noticed at the apex two years before I saw him, with some displacement of the impulse beyond the nipple line. It was first noticed after a five-mile run. He had been carefully looked after, and allowed to cycle and cricket a little, and he was much better than he had been; indeed, I think his parents thought too much was being made of his ailment, as they could not see that the boy was in any way incapacitated. But he wanted to go into the Army, and what were his chances of passing the medical examination became an important question. When lying down there was a systolic murmur, audible from the third rib to the left of the sternum, downwards by the side of that bone, curving round in the fifth space, and below the nipple up into the axilla, where it became much softer. When standing it

[1] I am indebted to Dr. McLannahan, of Stonehouse, under whom this boy came at a subsequent period, for permission to make use of these notes.

became both variable in position and intensity. The impulse was forcible and diffused. I do not think this boy will pass into the Army, and I certainly should not quarrel with anyone for refusing him, or even if anyone were to say that the heart were dilated, though I do not think it is; on the contrary, I believe the heart will prove a serviceable and a sound one as the framework of the boy's chest develops.

Once more, I saw last June a man in the Army, aged 21. He had been sent home from India with this on his sheet: He was about to be placed under an anæsthetic for abscess in his foot, and an examination of the heart showed the apex beat in the normal position, but also in the epigastrium, and over the right ventricle. First sound accentuated and accompanied by a blowing systolic murmur over the tricuspid area. The remark appended is that the local signs are in favour of an organic lesion, but the improvement of the man's general health pointed to a functional murmur.

I saw him with his then medical man a month or so after he arrived home, and his symptoms were chiefly a rapid nervous action. I cannot now say if there was any murmur, but I considered it essentially a nervous heart, and that there was no occasion to be anxious about his future. We lost sight of him, and he eventually went out to India again after six months' leave, and as soon as he started work and long and heavy marches he broke down again from, as he told me when I pressed him for definite symptoms, sheer exhaustion, and he was sent home "suffering from *valvular disease*, the effect of climate and duty." The *physical signs*, as recorded on his health sheet, being taken to indicate "organic mitral regurgitation, with tricuspid insufficiency." But what do I find? When standing there is absolutely no abnormality of any kind. When recumbent, the heart's action becomes cantering, and there is an impurity of sounds both at the apex and base. The real explanation of the case is that he has never as yet had the stamina required for the Army, and under the stress of climate and duty he becomes played out, not in the heart more than any other muscle, and as soon as he is off duty he recovers himself as he did on the former occasion.

Many a difficulty is there with these cases, and I cannot too strongly urge the necessity of taking a more liberal view

of the power of disappearance of even well-marked cardiac murmurs. There is no need to neglect them, or even to make unduly light of them. We do not know, and must wait and see. Such cases need watching and examining from time to time. It is easy to do this without committing one's self to any irrevocable diagnosis or prognosis until time has shown the way. And perhaps this applies with more especial force to childhood than to adult life. Pyrexial disturbances of all sorts are of the commonest of maladies up to ten or twelve years, and there is nothing more common during these attacks than for the first sound of the heart to develop a systolic murmur, in association with the excitement of the muscular action that is one of the common phenomena of fever. Clearly the heart in such cases requires to be kept under careful observation, lest anything escape us of permanent import to the integrity of the organ, but there is no need to excite the apprehensions of the parents. It is a feature of the febrile reaction of childhood, and for the most part these bruits quite disappear as the fever subsides and the child recovers its tone. In so important a matter as the question of the existence of endocarditis or valvular disease, no one should precipitately commit himself to an opinion from which it will be difficult to extricate either himself or his patient. Let me illustrate this by a case. A child has had an attack of fever of sorts. A systolic murmur has developed, and the heart is said to be affected, and the future sketched out in somewhat sombre light. The fat is all in the fire from the mention of heart disease, and the necessity for prolonged rest. But the child was not ill; its temperature was not yet stable, and although admittedly there was a systolic murmur audible from time to time, and I think some little displacement of the impulse, I took a much more sanguine view, based upon the grounds I have already given, that the murmur was a variable one, being frequently entirely absent, and that it was also distinctly a postural one. But it was obvious that my opinion was neither expected nor acquiesced in, and I should not be surprised if that child were still undergoing that most harmful process of being shielded from his environment in every possible way because he labours under the suspicion of having disease of the heart.

From the question of murmurs I naturally pass to the

impulse of the heart, or the position of the apex beat, as it is more generally called, and its meanings or indications. Upon this, also, far too much stress is laid as an indication of disease. The impulse has been described as having certain relations to the nipple and the fifth space, and I am far from attempting, or wishing to question, such a rudimentary fact, but it does not follow that if there be a departure from the normal in this respect, it is so much the worse for the subject of the deviation. It is possible to live a healthy life with the apex beat outside the nipple, and much more often so than some would seem to suppose. Why not? The heart is free to move within a considerable radius upon its suspensory ligaments at its base, and we are dealing with the living nervous heart, with the heart in action, and there is much need for caution in forming conclusions with respect to an organ of this sort. The position of the heart's impulse depends in truth a good deal in the individual upon the shape of the chest, upon the condition of the lung, upon the rate of action of the heart, whether hurried or not, and it depends upon the true concurrence of the systole of the many individual muscle bundles that the heart contains. Thus in small and long-chested people the heart is *likely* to be outside its normal limit, and yet have no ill-meaning such as we are discussing. So also in those who expand their lungs badly, or who are nervous under examination, the impulse may be considerably outside the nipple line. I saw a child not so long ago in whom, although the heart was beating an inch beyond this limit, I could not find the slightest evidence of any disease. The child had been said to have heart disease, but surely in the absence of all other evidence, it was better to let the child live a healthy life and watch it than condemn it for one sign such as this. I think it is of some importance to insist that this concurrence of the muscle bundles in their systolic contraction is by no means habitually so perfect as we are in the habit of assuming. I cannot help thinking that temporary reflux at the mitral orifice is not uncommon from some such cause, and that we are too much inclined to ascribe it to disease. We think of the systole as a sudden solid contraction of all the muscle of the ventricular wall, but observation and experience alike show that the departures from this precise action are by no means few and far between.

Take the passing irregularities that come to so many after a meal, after drinking tea, after smoking, excitement, or fatigue. They are, of course, exceedingly common, and when we watch the impulse in such, we certainly find it now here, now there. It is clearly due to some want of synchronism in the individual fasciculi, and it is not necessarily a matter of vital importance, although it is certainly one of physiological interest.

Nor must I omit to say a word upon the value of dulness. Within limits rather jealously watched, I should regard it as a safer sign of disease than the position of the impulse. But these limits must not be unduly stretched at the bidding of bias. Everyone knows that great increase of the size of the heart may be present without any increase of the dulness, and on the other hand, and it is with this that I am more concerned, there may be apparent increase of dulness without any increase of the size of the heart or of its cavities. Increase of the natural præcordial dulness often means no more than an altered relation of the heart to the chest wall or surface; a change in the pulmonary circulation or inflation, and not in the heart itself. For example, in the narrow-chested people of all ages and either sex, although women and children are its best illustrants, the dulness is often large from the simple fact that the lungs are small and not fully inflated, and therefore the heart is much more extensively in contact with the chest wall in front, and under this condition in a nervous subject, to hark back to the former section, it is wonderful how masterful the beat seems to be, and there is indeed excuse for thinking the organ diseased, although it is in truth quite healthy. But then as regards dulness, I would have these remarks apply chiefly to dulness at the base and over the right side, and very cautiously indeed, if at all, to the region of the apex. And obviously because the apex of the heart is covered in, more or less by lung; lung and stomach tend to tilt it round and away from the surface at this part, as it lies trending from the surface. So that, as I have said, there may be a very large heart that is undiscoverable by percussion, and a natural heart that may yet appear large. Even the spleen and the left lobe of the liver will get in the way of the determination of the position of the heart towards the apex, and as a result of long-continued observation, I must say that I regard percussion in this region as of

but little use, and liable, if we depend upon it much, to lead to serious errors. I therefore find it impossible to agree with the conclusions of those who, when they detect small differences in this area after baths and other forms of treatment, ascribe it to a reduction in the size of the heart. It seems to me that the Nauheim treatment in appropriate cases—not all and sundry—has indeed the warranty of *results*, but not that of any convincing topographical argument, such as its advocates claim for it.

I come next to a number of cardiac disturbances, which group themselves together under irregularities of action, and as an introduction to the subject I can hardly do better than recall to your minds all the vagaries of the action of the muscular fibre of the heart, that you may hear in any one afternoon in the out-patient room under the excitement of examination. The noises, the plunges, the thuds, the sudden momentary stops that come; and have you not often wished, as I have done, when as sometimes happens, the case staggers experience, and when, as I maintain, it is a more vital matter to be able to say positively that there is *no* disease, than to say there *is*, for the happiness of a life is far more linked to the verdict, "You are *healthy*," than to that other, "You are not quite sound, and you must take care of yourself," for the one means a full life, and the other a maimed one; have you never wished, I say, that some mechanical genius would invent such a cardiaphone as would enable one to examine that heart as its subject slept, untrammelled by his nerves?

Any of these conditions may be evidence of serious organic disease and a breakdown in the near future, but in themselves they may be simple functional disturbances, and of no great moment. Taken as they come, I think it is not untrue to say that they may be regarded as trivial, or at any rate hopefully, until you have proved them to be otherwise. This applies to some more than to others. Bradycardia and pain are certainly the most ominous, but either may be temporary only. Tachycardia in like manner is often a mere nerve excitement, and of no importance, though under certain circumstances it is a most dangerous disease.

Let me say a few words about each of these separately, and perhaps as most common comes first an irregular or intermitting heart. I know not which is the more common

or the less important. A heart that beats irregularly in time is very common as a transient thing. Again, I may advert to the power of the mere change of position of the body to effect this. Put a man on his back, from the erect position, and it will happen very often that the heart changes at once from a steady beat to a cantering or galloping action, or some new rhythm may develop, such as two beats distinct, followed by two feebler beats, or a more generally patternless irregularity may ensue. Those past middle age furnish the best examples at once of cardiac irregularity and of the difficulty there is in judging of its value as a symptom. There is, of course, an irregularity that is associated with definite signs of defect, either muscular or valvular, and symptoms of failure in the circulation. I do not allude to that. The picture that comes before me is that of the man or woman of, say 45 to 60 or more, who suddenly, perhaps, becomes conscious of a frequent full or choking sensation at the top of the sternum, or of indigestion, or of nothing that lends itself to words. You examine and find the heart pirouetting behind the chest wall like a ballet dancer, or a performance on the bagpipes to the tune of a Highland reel, if you could convert the idea of sound into that of motion.

Such a condition as this has a special proneness to come on after food when the stomach is distended; or later, when there is a tendency for the irregularity or intermission to be attended by the eructation of gas. It is clear that these conditions are often enough no matter of disease, for the attacks come on from time to time; they come and go quite suddenly; are absent often for weeks or months; between times there is no shortness of breath, or other evidence of heart disturbance; and they are likely to be associated with the presence of uric acid in the urine. There is plenty of evidence, therefore, that some fault of metabolism exists, and therefore some temporary changes in the nutritive fluids. One may well doubt if several causes, each in its own degree, may not conduce to this overcharging of the furnaces, but so marked is the association with one or other stage of digestion, that I cannot but think that many own immediately an abdominal origin; that they are caused through some waning influence on the part of the great ganglia of the abdominal nervous system.

And perhaps this may throw some small ray of light upon

one or two other maladies which, although we must call them disease, it is questionable whether *qua* heart they are really so. Two are common, two are of pathetic interest, so swift, so tragic, may be their ending. I will take them in their order—Graves' disease, angina pectoris, some forms of sudden death. The first named comes properly next, as in effect it is exactly the same disease as has just been described. It differs in no other way than that it is much more likely to be intractable, and even permanent in some. No better illustration of the need for keeping separate disease and unnatural function could be given, for it will exist for years without producing evidence of disease, and it therefore affords the best possible example of the never-say-die principle that is inherent in the heart, and of the power of that organ to cope, and cope successfully, with very adverse circumstances.

Angina pectoris is not as happy in this respect, but it also has in some respects a similar history. It is well known that when any one dies of this malady the coronary arteries are almost invariably found diseased, and although it has been a much vexed question, the disease found has come to be considered as its cause. And I think Osler at any rate has stated that in *most* cases carefully examined during life some evidence of disease about the aorta will be found to exist. I demur to both opinions.

Angina pectoris is common amongst us, if we are on the look-out for the milder forms of it, but then it is not for me a sudden dreadful chest pang that comes and kills within, perhaps, a few hours. That is a rare variety. It is much more a paroxysmal twinge in the epigastrium or chest, that almost invariably takes a man in walking, and apparently because he walks, and because he walks uphill, and moreover it is quite astonishing at how small an incline the anginal patient will shy. He stops and looks into a shop, and within a few seconds the pain will have vanished, and its departure is nearly always associated with the eructation of wind. So much is this the case that it is often mistaken for a simple indigestion, which is all the more plausible in that it is a common visitant when the walk is taken soon after a meal. It is constantly finding out the city man after his breakfast. It is also a malady that comes and goes, sometimes goes altogether, but is also more usually one of the most

intractable of the neuralgiæ with which we are called upon to deal, and too often it has come to stay, with intermissions. And here is the point: I have known it in two cases to last twenty years and several times some, if not many years, so long, indeed, that it seems impossible, at least unlikely, that the disease that was found at the last was indeed present at first. I have certainly examined these mild cases by the score without finding any trace of disease of the heart, and all my later experience confirms me in saying what I said years ago in this respect, that the pain is best explained by regarding it as a neuralgia, or storm, that emanates from the great abdominal brain, although I was inclined at one time to regard it as a cramp of the heart.

It might perhaps be thought that the very generally accepted association of vascular tension with angina is adverse to this opinion, and so I think it might be. But I have never yet accepted this view of angina pectoris for more than a small proportion of cases. I say—assured in my own mind that I am right, although it is contrary to the opinion of the most experienced men—that as a rule there is no increase of tension; I have had my finger on the pulse all through a spasm of angina many a time. Angina is, if anything, a disease of low tension, as is to be expected of a crushing pain that emanates from the pit of the stomach. A man is seized in the graver cases with a pain so bad that it kills him. He knows that he is dying, and he dies—a quite uncommon fact in human experience—and we call it heart disease. Why? For my very life I cannot imagine. These are not the symptoms of heart disease. The symptoms of heart disease are mechanical, plus distress, not *agony*. And, moreover, the most extreme tension may be quite free from pain. Or in the commoner cases perhaps the man goes to bed, wakes up with a pain—how bad can be never told, and he dies quite quietly. A sudden death from heart disease again we call it; but the untutored juryman in such a case comes nearer the mark, I fancy, when he returns his verdict as the "visitation of God," for is not the catastrophe much more like a lightning stroke that has rent the organism, stopped the machinery, and left no trace of the real cause behind it.

Of the usual explanation of sudden death when *no* obvious cause exists I have much the same to say. Such cases are

not common, but they occur, and heart failure is now the prevailing diagnosis, I think; it occurs so often in the first column of the *Times*. But I refuse to accept such a verdict when, as is surely no uncommon occurrence, the accused organ has been examined within quite recent times, and to all outward seeming has been passed as healthy. Moreover, the heart has far too much grit in it to tumble down dead except under well-known and definite conditions.

Not much time remains to me to discuss the other two muscular derangements that I have included in my list, viz., tachycardia and bradycardia, or the runaway heart and the slow heart.

The runaway heart we are in the habit of considering as a *nerve* effect, that is, as some disturbance of the regulating ganglion of the heart; but I doubt if this be so for the slow heart, in which there is at any rate a common tendency to assume degenerative changes in the muscular wall with all the necessary consequences. Yet the evidence is not wanting in many of these cases, as the fault runs on that points the other way. One can readily understand that if the nervous energy of the heart should fail, the muscle would probably lose its tone, and dilatation of the wall would be very likely to follow. But that there is any appreciable change either in nerve or muscle in the first instance is surely disproved by its suddenness of onset, and sometimes (probably generally in the case of tachycardia) of its departure, good health remaining between whiles, I should not say that a preternaturally slow pulse was often sudden in its subsidence, although I have known it so, and, perhaps, especially in cases that have raised suspicions of gout. As a rule it occurs in people past fifty, and when it comes it comes to stay. There need be no symptoms of heart failure; it would seem more as if the generator were working badly, and by-and-by a switch fails, the circuit breaks, and dissolution comes. I incline towards some of these cases, at any rate, being bulbar in their origin.

And, as bearing on this point, think of the heart, the pulse, of Addison's disease; the heart, the pulse, of severe abdominal injuries, and of other maladies I cannot now mention. The heart you can hardly hear, the pulse you can hardly feel, and yet withal a something about them quite different from the "weak" heart, the "weak" pulse of common parlance, which

mean nothing at all. There can be no question of disease of the *heart* in these; they are suffering from a profound interference with the great nervous centres of animal life; the pitcher is broken at the fountain, and you know it, but yet it is past finding out.

All these muscular anomalies, too often ascribed to fatty and other degenerative changes in the wall of the heart itself, link up together in one great group, whether they be slow hearts or quick hearts, or irregular hearts, or what not. They are all more or less an expression of, if you like, morbid, nervous agency, of which some, perhaps, are toxic and temporary, some neuritic and likely to be permanent.

Now I wonder whether you have followed my drift, for I must confess, as I retrace my own thoughts, that innocence and guilt seem to have been somewhat incongruously mixed; I must often have seemed to have been straining at a gnat and swallowing a camel. Nevertheless this endeavour to bring within *proper limits*, and only this, the significance of some of the common forms of departure from the normal function of the heart, is directed to the diagnosis, treatment and prevention of real disease. Discussing a questionable case of heart disease the other day, it was said to me, "There is no *disease;* the heart is only a little dilated and fatty." But what more disease can you ask? It points well my moral, which is this: that all these ailments that I have mentioned, ofttimes trivial, ofttimes transient, are too often but pegs upon which to hang a diagnosis of dilatation of the heart, and in the present day we make much too free use of this diagnosis. I regard dilatation as one of the worst of all the heart's diseases, and to play with such a term is to play with a torpedo. Surely dilatation, save in exceptional circumstances, should be reserved for a disease that is associated with some series of definite symptoms, not made dependent, as over and over again it has been, upon the mere fact that the impulse can be felt to beat in the nipple line, or even, perhaps, a little beyond it; or upon the presence of a transient murmur.

I must not go so far as to say that dilatation cannot exist without symptoms, for in the obscurity that surrounds sudden death it may be that it can; still, it must surely be an exceptional occurrence, and I think one ought to expect that, ever

in slight degrees, some of the signs of a failing circulation should exist, and amongst these I emphatically do *not* include either giddiness or fainting. Disease of the heart seldom, if ever, causes either. I have often said this before, but it is a point that still needs rubbing in.

If ever the history of medicine for this last decade or two comes to receive any exhaustive description, I fancy that *upon* the Nauheim treatment for dilatation of the heart will rest a large share of responsibility in this matter, for dwelling with such insistence upon the existence of dilatation, when signs and symptoms other than dulness on percussion are completely, or almost in abeyance.

The weaklings and sensitive about their health, always anxious about the "weak heart," have caught on, so to speak, and numbers have flocked to this place and that for baths and exercises for the minor ailments that I have indicated, who have been quite free from anything like dilatation and of any real disease. And the general trend on the part of the delicate has, I think, reacted upon us, and in our dread lest we make a mistake, we have too often outrun all sobriety of judgment.

And why do I make such a point of this? Because, as I think, it is a harmful thing for anyone to coddle his heart when there is no disease, and I think we are far too instrumental in aiding and abetting this. As regards dilatation I rather hope I see signs of a turn in the tide, for on two occasions of late patients have said to me spontaneously that they have got a *distended*, not a *dilated*, heart, and perhaps that was so.

But there are other terms in general use that I like little better than this one of dilatation, because they have come to mean too much. One of them is "heart strain."

Take the last case of this kind that has come before me: A young man, aged 25, has strained his heart, so he says, rowing, three years ago, and has never been well since: his heart still running away if he does anything violent. But what is the truth about him? He is a 6 ft. 4 in. specimen of the most weedy nervous humanity one could ask to see, with a spine like a corkscrew and lungs, of course, to match. His weight is only 10 st. 12 lbs. His heart is sound enough. It is no fair description to call this heart strain; lung strain

would be more to the point if one needed to single out an organ, but a neglected sapling would better describe him. He is chained to a desk from ten to four, has three weeks' holiday once a year, and at night is a tag of the fringe of a great city. What is there of fitness in calling this disease of the heart, or heart strain? At any rate if it be, the treatment for it, if it could be adopted, would be to send him rough riding over a cattle ranch for a year or two, to develop his muscular and bony frame, that is *more* work for his heart and not less.

We must all have come across many similar cases, some even, maybe, who have been condemned to long periods of inactivity because of one or other of these several conditions I have mentioned, But I doubt if rest is the proper treatment for such cases, or if the heart should in any case be the subject of blame. My conviction is that if nothing were said about the heart, the patient calmed, kept quiet for a day or two, and then allowed gradually to resume his natural pursuits, we should have far less of the months of cardiac trouble that are now, as I think, by no means uncommon.

A weak heart has served me as a text before now, but it still flourishes as strong, if not stronger, than ever. I should have no objection to the term if it were one devoted exclusively to letting down easily the man with real disease, and of keeping life and hope within him. Such a use would to my mind be nothing but good and proper; but it is a very different matter when its chief value is to clothe a sound heart in the garb of a diseased one. A man with aortic regurgitation the other day wanted me to call his heart a weak one, and as I had already told him that he had a definite valvular defect I was willing to fall in with his humour and to agree with him that his heart *was* decidedly "*weak!*" No harm was done there, but I by no means feel so accommodating when I am asked to call a heart weak when after careful examination I have found it healthy. I only know of two kinds of heart, the healthy and the diseased ones, and these weak hearts, like the dilated ones that I come across, are nearly always structurally sound. What are the symptoms of a weak heart? I know of none. And yet the use of the term leads either to a state of nervous dread, from which recovery is most difficult, or else to a life of luxurious idleness, which, by the enervation it causes, is likely sooner or later to be precedent to the end it would seek to avoid.

I cannot help thinking that in this day of what we must do and what we may not do, this abundant care for the well-being of the individual in all directions, we are getting somewhat sickly in our views of health, and we are in danger of assuming the existence of a tripe-like heart, and overlooking the energetic attributes of living muscle. The heart does not become dilated readily. On the contrary, it is equal, and more than equal, to all the ordinary, and many of the extraordinary, emergencies of life. Aye! And I am glad to insist upon much more than that, for as you all well know, even under the stress of serious incurable disease its energy will keep its failing powers going for much longer than our poor forecast gives it credit, and sometimes is all the better for being so called upon. I cannot give a better illustration of this than the case of mitral stenosis.

When we consider that the contraction of the valve must take years to mature, and even when it is apparently fully come, it may last, as I can say, for twenty years, the woman even living a fairly active and useful life, one may well carry the lesson to other forms of heart disease, and deal a little less extravagantly with the principle of rest. I often see, as I think, this treatment pushed too far, or perhaps I ought rather to say that, judging no man, I often ask myself, is this good or bad treatment? I see people absolutely forbidden to walk uphill, or exercised—no! aired only—in a bath-chair, or carried up- and downstairs; or pinned to bed, and I feel inclined, with the world, the flesh and the devil of my earlier years, to renounce them all. I daresay I am wrong, but it is seldom indeed that I ever order anyone to be carried upstairs. It should be reserved for well-considered emergencies that seldom come, and Oertel's suggestion of graduated exercise uphill I believe to be a most valuable one, provided that it is taken very slowly and with the mouth open.

In this frame of mind one will make mistakes. I sadly and sorrowfully admit it. Indeed, in the mood of the great Napoleon, I must say I have been mistaken so often I no longer blush for it, and no doubt after having given a positive opinion in favour of a sound heart, a sudden death will now and again come to torture you and, as it were, to make you hesitate in the course marked out. Such things may well

quicken our perception, and go to render our judgment more keen.

But none the less I am sure of this, that we do far more good in our day by pronouncing people sound, if out of health, and by sending them forth with strengthened hope, than by keeping them in the chains of uncertainty and nervous dread, than which nothing can be more crushing to the utility of a life, or more harmful to the chance of regaining health.

Years ago there was a discussion at one of the Societies upon aneurysm of the aortic arch, and I having made the remark that it was practically an incurable disease, as judged from the evidence of the *post-mortem* room and the museums, and so it is; Sir William Broadbent promptly and felicitously retorted that the *post-mortem* room was not the place to look for cures! I was quick to see then that what seemed an obvious truism did but dissemble the truth, but to-day and here I am older and I now see that other face, with fuller meaning, which then perhaps I slighted. And so I have availed myself of the honour you have done me to discourse to-night in other terms upon the buoyancy of life, and to preach that it is not well to seek too much for the dead amongst the living.

To ask you to *accept* my opinions would be the last thing that I would do, but I may ask you to think them over and weld anything that may be agreeable thereto, with your own experience.

CERTAIN INTRA- AND EXTRACRANIAL LESIONS PRODUCED BY INJURY AT BIRTH.

By J. Howell Evans, M.A.,M.B.,M.Ch.(Oxon), F.R.C.S.Eng.
Late Assistant Surgeon to the Cancer Hospital; Registrar to the Chelsea Hospital for Women, &c., &c.

The causation of neonatal cranial lesions has been attributed to many and diverse conditions. Some authorities consider that they have given adequate explanations of the mode of production of these lesions. There remains more to be said and further work to be carried out in connection with this wide subject, which abounds in interest not only to the general practitioner and obstetrician, but also to the surgeon, neurologist and degeneratist.

The limitation of time at my disposal and the fact that you have already (this evening) been listening to a most interesting paper, on a subject very closely allied to this, compel me to confine my remarks to extracranial vertical hæmorrhages or cephalhæmatomata neonatorum.

There must be some common factor at work under varying conditions—different presentations, easy and difficult labours—and which in all instances will conclusively explain the origin of cephalhæmatoma, whether such occurs on the parietal, frontal, or occipital bone. The trauma exerted upon the fœtus during its transit from an intrauterine to an extrauterine existence is one of marked severity, and though in the majority of cases which survive there appears no evidence of any ill-result, yet every individual in its advent into the world is not so fortunate; accordingly a large number are not exempted from the immediate or remote effects of this neonatal transit.

The head of the fœtus is relatively large, and its relative largeness becomes greater with the increased size of the fœtus. The bones which comprise the vault of the fœtal cranium are loosely joined together by membrane at the sutures and fontanelles; it is this membrane which allows of an adaptability of far-reaching importance.

The cephalhæmatoma is stated to be the result of pressure exerted upon the fœtal skull during its passage through the parturient canal; its production is not necessarily associated with instrumental labour, or with a birth of great or even slight difficulty, neither is a cephalic lie necessary, because cephalhæmatomata have been observed in breech presentation when the inferior cephalic planes become subjected to more direct pressure, and the vault moulding is altered.

As a rule the cephalhæmatoma occurs upon one of the parietal bones, more frequently upon the right parietal bone which, in the usual presentation (L.O.A.) of the child, is the one particularly exposed to pressure moulding during birth; however, these cephalhæmatomata occur over the occipital bone and even over the frontal bone; furthermore, several instances of multiple cephalhæmatomata have been recorded.

By a series of lantern slides I will illustrate the more evident and more common clinical varieties of neonatal trauma which are associated with hæmorrhages of varying

degrees, and at the same time demonstrate how their occurrence is dependent upon two anatomical points:—

(1) Irregularities of ossification in the bones which comprise the calvarium.

(2) Communications between the intra- and extracranial vessels—arteries and veins.

From the numerous illustrations you will realise how these two conditions are amply demonstrated, not only in the human subject, but also in all mammalia.

In some of these illustrations you will also observe the relation which the veins accompanying the important communicating arteries bear to the intracranial venous sinuses; you will thus appreciate the far-reaching results of a superficial hæmorrhage—a mere film of blood—which may have arisen from thrombosis of one of these tributary veins, and which may in process of time produce its grave results upon the cerebral cortex. With the natural persistence of these anatomical variations many successive generations may evidence cerebral deficiency which are invariably regarded of hereditary transference (of cerebral origin); I am inclined to view many of these conditions of deficiency as dependent upon transmitted anatomical variations. If my view be correct of these extracranial vertical hæmorrhages, then a similar origin will explain many of the intracranial vertical hæmorrhages.

In the absence of certain physiological knowledge and of exact pathological data from which to form an accurate idea of the essential nature of such a condition as epilepsy, it is not remarkable that slow progress has as yet been made, notwithstanding the many efforts of the most brilliant minds to elucidate its nature. Unfortunately the causes of cephal-hæmatoma are beyond our removal; the early symptoms are very slight, and the considerable absorption which takes place has beguiled many medical men to believe that no untoward after-results arise. If no other reason be forthcoming it is necessary to relieve the pressure produced by effused blood over a possible depressed fracture, so that the membrane bone may procure its spontaneous correction by virtue of its elasticity.

I strongly recommend removal of the effused blood, because it is the result of a reactionary hæmorrhage, which in this

situation demands surgical measures even more strongly than in many other parts of the body. It is impossible to predict the consequences of any violence inflicted on the head of an infant, and to gauge the degree of imbecility which may result in later years.

Again, both intrā- and extracranial hæmorrhage may occur at the same time, and the removal of the outside effusion may allow of a more ready absorption of that within the skull.

I cannot view the external hæmorrhages entirely in the light of outward visible signs of an inward and spiritual exemption, but rather in the reverse way.

THE RECOGNITION AND TREATMENT OF MENTAL DISORDER IN PRIVATE PRACTICE.

By Dr. W. H. B. Stoddart.

Mr. President and Gentlemen,—When your Council very kindly afforded me the opportunity of addressing you, I felt that I had so much to say that I had the greatest difficulty in choosing a title for my paper; and in the end I have not been very successful, for, were it not for the twenty minute rule of your Society, my comprehensive title would give you some justification for supposing that my address would be interminable. You need not, however, fear that I shall weary you with an attempt at an exhaustive study of mental disorder; I wish merely to give you a few practical hints for private practice.

Firstly, I want to ask you to recognise a case of mental disorder when it comes before you. I do not mean that the general practitioner is expected to make a diagnosis and prognosis of a case of insanity, but merely that he should recognise when a patient is suffering from unsoundness of mind.

Now this request is not so absurd as it appears. I can well believe that many members are staying away to-night, because they consider that this subject has no interest for them; because mental disorder does not occur in their practice.

Let us consider what are the probabilities *à priori* of a case

of mental disease occurring in a given practice. There has been a steady increase since the year 1859 in the proportion of insane to the general population. In that year, 1 person in every 536 was certified as insane, in 1895 the proportion was 1 in 324, and in the ensuing years the numbers were 1 in 319, 1 in 314, 1 in 309, 1 in 303, 1 in 302, 1 in 298, 1 in 293, and in the year 1904, 1 in 288. The tide is steadily rising. About 20,000 persons are certified as insane every year; that gives an average of one for every general practitioner per annum; but in addition to these cases, there is an enormous number of unrecognised insane out of asylums; many die of their unrecognised disease, many of inanition, and nearly 3,000 of suicide every year. Over 200 crimes are committed annually by persons suffering from mental disorder, but not under treatment; and scores of wills are disputed annually on the ground that the testator was insane when he made the will, although not under treatment for insanity at the time.

There are many causes of this anomalous state of affairs. One is that there is too great a wealth of euphemisms for insanity: Hysteria, anorexia nervosa, neurasthenia, "nerves," and even "liver." To the use of such euphemistic terms we have not the slightest objection, provided it does not lead to erroneous treatment of the disease; but I fear that the diagnosis is too often made in all seriousness when the patient is suffering from well-marked insanity.

When a young girl takes to drinking her urine and screaming the house down several times a day, that is not hysteria, it is insanity. When a patient wants to be left alone, feels tired of life and refuses food, that is not neurasthenia, it is insanity, probably melancholia. When a patient is unoccupied and does not speak for weeks together, that is not hysteria nor obstinacy, nor is it catalepsy as the neurologists often tells us, it is a mental disorder, probably stupor of some kind.

Perhaps the most fertile source of error is that the diagnosis of insanity never occurs to a practitioner, whose main object is the detection and treatment of physical disease only. If he were to allow the possibility of the existence of mental disorder more frequently to cross his mind, he would find that he had quite an appreciable proportion of early insanity to

treat regularly in his practice. The treatment, well carried out, should prevent many cases from drifting into chronic insanity.

Hypochondriasis is one of the greatest snares. A patient suffering from this disorder sends for his or her medical man frequently, and at all hours of the day and night. When the doctor arrives the patient tells him that he or she is dying; whereas the most careful physical examination fails to detect anything amiss. The doctor may look upon such a patient as a nuisance; but humours his fad by keeping him well supplied with bottles of medicine. Meanwhile, the diagnosis of mental disorder never occurs to him.

Here is an example of a different class of case that came to my notice only the other day. A man, aged 35, used to feel depressed and ill whenever he retired to his bedroom at night; from this he concluded that poisonous vapours were instilled into his room. He very wisely went to his doctor for advice; but this was that he should remove from the neighbourhood, so as to escape his enemy. The patient's next move was to inform the police who made an examination of the room, and then took the patient to an infirmary to be treated for insanity. I can assure you that the police know a great deal more about insanity than the average medical man.

The fact of the matter is that the average medical man's standard of health is much higher when he is dealing with physical disorder than when he is dealing with mental disorders. If the patient is suffering from a mild attack of indigestion or constipation, a cold in the head, a relaxed throat, a slight error of refraction, an acne pustule or a troublesome corn, the condition is regarded as sufficiently serious to call for treatment; but if the patient is suffering from depression of spirits he is but cursorily, if at all, examined, given some tonic or something to act on his liver, and told to trouble no more about it; and, which is worse, the medical man troubles no more about it until his patient attempts suicide.

Similarly, loss of memory, even considerable loss of memory, is not taken as seriously as it should be. There is not necessarily an examination of the patient, although this memory defect may be the first symptom of general paralysis threatening dissolution of life.

Certain alcoholics suffer from mental disorder, known as paramnesia. Every morning they tell their doctor in all seriousness that they have been for a walk in the park, when they have not stirred out of the house; yet it never occurs to that gentleman that this is a serious mental symptom, he may even regard it in the light of a joke, as one does in the case of the romancers one meets in every-day life; but it *is* a serious symptom when a patient's word becomes absolutely unreliable; he is not fit to earn his living.

If I were to take you round Bethlem Hospital, you would be surprised to find how slight a mental disorder suffices to incapacitate a man. Many picture Bethlem as a pandemonium full of patients suffering from a condition resembling *delirium tremens*, but much worse; but I can assure you that the case of *delirium tremens* that you are probably treating at the present time is a more striking picture of insanity than anything I can show you at Bethlem.

Now I have warned you against euphemisms for insanity; but in addition I wish to warn you against 'kakophemisms,' if I may be allowed to coin a word. Never speak of a patient as being mad, or a lunatic, and above all avoid the use of slang synonyms for these words. "Mad" and "lunatic," are words with an evil connotation, dating at least from Shakespeare's time, and if we are sending a patient to an asylum, we should speak of it as a home, institution, or hospital. The word asylum has never sounded well since the appearance of those two scandalous novels, "Hard Cash" and "Valentine Vox."

There is no doubt that most cases of insanity are best treated in a special institution for that purpose, and the patient's friends have little or no objection to his being treated for mental disorder in a special home; but they revolt very naturally at the idea of his being "put away" as a "lunatic" in a "madhouse."

This brings me to the next part of my paper. Having diagnosed mental disease, what is to be done with the patient? Is he to be treated at home, or sent to an institution, or placed in the private care of some medical man who takes single patients, or sent to the seaside, or on a voyage of travel?

Firstly, with regard to travel: If the patient is demented or otherwise incurable, travel is obviously an unnecessary

expense, and if the patient is suffering from an acute mental disorder, and presumably curable, travel is the very worst form of treatment that can be adopted. I condemn it absolutely and without qualification. I regret to say that there are several physicians of repute who see a large number of mental cases in consultation, and who almost invariably recommend travel as the mode of treatment, frequently to the permanent detriment of the patient's mental condition. It may be that these physicians are too strongly influenced by the wishes of the friends, for these same gentlemen would never think of sending a case of ophthalmia to study the pictures in the Academy, or a case of otitis to go and listen to Sousa's band. When the patient has recovered there is, of course, no objection to a sea-voyage or a visit to the seaside, as a means of further recuperation; but during the acute stage such treatment cannot be too strongly condemned. The same may be said of manual labour, which is all too often recommended as a form of treatment for acute insanity.

Now with regard to private care: Dements and chronic quiet delusional cases are the proper patients to be treated in this way; they are preferred in houses where single patients are taken because they give little trouble.

A good many doctors are willing to take such patients and look after them well, but it is rather an expensive way of taking care of an old dement; the charges are seldom less than six guineas a week. A certain number of non-professional people, farmers in the country, old asylum attendants and others, are also prepared to take charge of such patients at a lower rate; but I do not like this principle, and I should recommend you to know a great deal about any lay person into whose care you are going to commit one of your patients.

The next question is a very important one from the general practitioner's point of view: What cases should be treated at home rather than sent to an institution? And what cases *can* be treated at home? This last question arises in nearly every case, because the friends so frequently raise an objection to the patient being "put away," as they call it.

If the mental disorder forms a part of the general break-up of an aged person, I feel that an effort should be made to treat the disease at home, for the simple reason that it is an exceed-

ingly sad and serious happening that an old man should be sent away from home to die and to end the last few weeks of his life in an institution for the insane. Obsessional insanity should also be treated at home, if possible.

As the word obsession is probably not a familiar one, I will attempt to explain it as briefly as I can. An obsession is a chronically recurring imperative idea, claiming the attention before all other more important matters. The simplest form of obsession includes such psychical incidents as 'tunes running in the head,' and Mark Twain's now classical

> "Punch, conductor, punch with care,
> Punch in the presence of the passengare."

When you have been writing several letters you may get the imperative idea that you have placed them in their wrong envelopes. You open them and find that they are all right. But again the idea occurs that in placing the letters back in their new envelopes you might not have been sufficiently careful. The idea haunts you, and again you give way to it and open the envelopes again. This may recur several times more without crossing the borderline between sanity and insanity; but if it recurs so frequently that the letters never get posted, the borderline is crossed and you are suffering from obsessional insanity.

There is a curate whom I occasionally see and who suffers from this form of insanity. Here is one of his obsessions: This gentleman gets the absurd idea that he has accidentally pushed some one into the inkpot. He knows and realises the absurdity and impossibility of such an occurrence, and for a time resists the impulse to look into the inkpot and see if there is any one there; but no relief comes until he has done so, and he cannot get on with his work until he has satisfied himself on the matter. He looks into the inkpot, sees that there is nobody there, and is then, and not till then, able to go about his business.

Such cases as these should be treated at home, because their every-day occupation is the best relief from their troubles. In the life of an institution for the insane there is not sufficient to occupy their minds and they get worse there instead of better. They should therefore be urged to go on with their work.

Other mental disorders that may well be treated at home

are those of short duration, such as the delirium of fever or the delirium of infection, *acute* intoxications by such drugs as alcohol, morphia, cocaine and atropin, *some* acute epileptic states, and *some* of the exhaustion psychoses, such as those which occur after prolonged fatigue or profuse hæmorrhage. These latter disorders usually take the form of acute confusional insanity, or acute hallucinatory insanity. In this last condition the problem of home treatment is usually determined by the answer to the question whether the patient is noisy or not. Lastly, acute delirious mania can sometimes be treated at home.

But perhaps the most important item in the consideration is the problem of expense, for it is a most expensive procedure to treat mental disorders properly at home. In addition to the ordinary expenses and inconveniences incident to any illness in a private house, you must have at least two nurses, and probably four or more, according to the nature of the case. There are your own fees and probably those of a consultant; for the friends usually like to have an occasional visit from a "specialist." You will see, therefore, that home treatment can only be adopted with our wealthy patients.

Having decided to treat the patient at home, the next question that arises is how to do it.

Firstly, with regard to the nurses: A hospital nurse is of little use for a mental case; nurses who have plenty of asylum experience should be obtained, male nurses for a male patient and female nurses for a female patient, and they should hold the certificate of the Medico-psychological Association.

Next a room or suite of rooms should be prepared, preferably on the ground floor. The amount of preparation will very largely depend on the patient's condition; but I will indicate what should be done in a moderately *severe* case.

Let us suppose that you wish to convert his bedroom into something which would serve the purposes of a padded room. All the furniture, including the bedstead, should be removed, and the bed made up on the floor. Collect all the mattresses, pillows, bolsters, feather beds and rugs that can be spared; suspend them round the walls and strew them about the floor according to the patient's peculiarities. Have wooden stops screwed into the window frame so that the window

will not open more than nine inches. The lower half of the window should be boarded up and the boards concealed by a mattress. The fire should be protected by a strong fixed fireguard. All keys and bolts should be removed, including the bolt of the water-closet, so that the patient has no opportunity of isolating himself.

If the mental disorder is of such a nature that force has to be used occasionally, the force must never be employed single-handed, lest the patient be accidentally hurt ; there must therefore be no stinting in the number of attendants.

On the other hand, the attendants should be encouraged to interfere with the patient as little as possible. Nothing is more irritating than to feel a hand in constant contact with your arm, its owner being ever on the alert to prevent the slightest movement on your part. Let the patient wander about his room every now and then if he wishes.

As regards medicinal treatment, the first aim must of course be to remove the cause of mental disorder. If he is anæmic give him iron ; if he is epileptic give him bromide ; if he is alcoholic, cut off his alcohol, and so forth.

The attendants should keep a record of the patient's weight, sleep, food, bowels and urine.

With regard to the bowels, it must be remembered that diarrhœa is often a symptom of constipation, and that a dose of castor oil is frequently the best thing to stop it. And it must also be remembered that the bowels may be open daily, leaving an accumulation behind which is deleterious to the patient's health. Restless movements of the small joints of the fingers are often indicative of this condition in mental cases. On the other hand, it must not be forgotten that many hypochondriacs complain of constipation when they are not in the least troubled in that way.

Sleep is to be encouraged by removing all causes of insomnia, such as rattling windows, stuffiness of the room, coldness of the feet, &c. Before resorting to the use of drugs, it is well to try the effect of a glass of warm milk and a few biscuits at bedtime.

As a rule, however, insomnia is an exceedingly troublesome symptom of mental disorder, and one which frequently refuses to yield to such mild measures. Under such circumstances it becomes necessary to resort to hypnotic drugs. The choice

of a hypnotic opens up a very wide subject, which I can only refer to very briefly in a paper of this nature.

Bromide with hyoscyamus is probably the best combination for nocturnal restlessness in the sane. Chloralamide, trional and veronal are also very useful drugs for general practice; but I am unable to recommend them for the treatment of the insomnia in severe mental disorder.

For the insane I have come to the conclusion that chloralamide is useless. Nor is trional a successful hypnotic for these cases; it sometimes works well with senile patients; but it must never be forgotten that it causes a great deal of degeneration of the nervous system, so much so that one investigator of degeneration of the neuron in animals invariably uses trional, because it produces the microscopic lesions characteristic of degeneration in so short a time as thirty-six hours after the first dose.

My personal experience of veronal is that, if sufficient is given to make an insane person sleep it also makes him sick. The hypnotics which are found to be most successful with the insane are sulphonal, paraldehyde and amylene hydrate. When the patient has difficulty in getting off to sleep paraldehyde is the best drug to use; it restores the sleep habit. It is also worth remembering that paraldehyde is a cardiac stimulant.

The pharmacological characteristics of sulphonal are that it takes several hours to act, that it is progressive in its action, so that the sleep becomes deeper and deeper and leaves the patient drowsy in the morning, that it is a motor sedative, and that it is cumulative. Sulphonal is therefore the ideal hypnotic for excited patients who get off to sleep easily, but wake up early.

Amylene hydrate acts so quickly that it should not be given until the patient is in bed; it is fairly certain in its action and its effects last until the morning and not later. I have never seen any ill-effects from the drug.

If all these drugs fail, it sometimes becomes necessary to resort to a general anæsthetic in order to procure sleep. I am sure that I saved the life of one patient in this way. She was suffering from acute delirious mania, had had no sleep for five days and nights and no food for forty-eight hours. Even the smallest quantities of milk given by the

feeding tube were rejected by the stomach. The bowels had not been open for many days, it was impossible to give her an enema, it was even impossible to take her temperature on account of her excited state. She was rapidly becoming exhausted. Here was a severe condition demanding severe treatment.

I accordingly anæsthetised the patient with chloroform. When she was deeply under, an enema was administered and the rectum cleared. The stomach was next washed out and she was fed with a pint of milk, two eggs, a drachm of sulphonal and two ounces of white mixture. Her temperature was taken and the anæsthetic continued for another hour. The patient slept for sixteen hours, then awoke, took food and never gave any more trouble. A fortnight later she was convalescent.

Nurses who are accustomed to deal with patients suffering from mental disorders are usually very tactful and capable in getting them to take their food; but it occasionally happens that no amount of coaxing will induce the patient to take food. Under these circumstances it becomes necessary for the patient to be tube-fed, either nasally or orally. The patient should be placed on his back and the doctor himself should feed him with a pint or a pint and a half of milk and eggs, by the aid of a gag, œsophageal tube, and funnel. This is much better than pouring the food down his throat out of a feeder; this method is a fertile source of fetid bronchitis and pulmonary gangrene, some of the liquid is apt to go down the trachea.

Tube-feeding is not a difficult matter if you have plenty of assistance, the tube well oiled, and everything ready to hand. But just two warnings to avoid the possibility of inhalation pneumonia :—

Should the patient vomit up the side of the tube, his pharynx becomes filled with liquid which he is unable either to spit out or to swallow; the only course open to him is to inhale it, which he is bound to do involuntarily. To avoid such a complication, the tube should be at once withdrawn, and the patient set free for the moment.

It is also to be remembered that at the end of the feed, there is always a little milk remaining in the tube and there is the possibility of this small quantity falling into the larynx as

the tube is withdrawn. To avoid this the funnel should be kept low while the tube is being withdrawn, so that all residual milk syphons into the funnel.

But above all things, the patient must be fed. Food is the most important factor in the treatment of mental disorders; and it must never be forgotten that your patient will never recover unless he puts on weight. For this reason, the attendants should keep a weekly record of the patient's weight.

The medical man should visit his patient frequently, at least twice a day. Frequent visitation helps the patient to gain an insight into his own mental condition; and it keeps the nurses up to their work.

Lastly, we have to consider the mode of procedure, should it be decided to send the patient to an institution. If the patient is unable to pay for treatment in a private asylum, the usual course is to inform the relieving officer of the patient's mental condition. When this is done, the responsibilty of the medical practitioner is ended.

If, however, the patient belongs to the educated classes and is fit to mix with ladies and gentlemen, he may be treated as a private patient and sent to some institution where they take such patients free of charge; such as Bethlem, St. Luke's and various other hospitals dotted about the country.

The mode of procedure for such patients and for those about to be sent to a private asylum is as follows:—

Having ascertained that the authorities at the institution are able and willing to take your patient, you should obtain from them the necessary legal forms. These consist of a petition and statement to be signed by the nearest relative, or friend in the absence of a relative; two medical certificates and a justice's order. There need be no difficulty about the filling in of these documents; because there are full instructions at the side.

If there is any imminent danger of the patient injuring himself or others, or if his life is threatened by his refusal of food, he may be temporarily placed under care on an urgency order, which can also be obtained at any institution for the insane. This mode of procedure is much shorter; all that is required being an order and statement of particulars signed by a friend or relative and one medical certificate.

On the strength of these documents the patient may be detained for seven days, during which time it is necessary to complete the customary order on petition.

I have, of necessity, only been able to touch the fringe of the subject, but I hope I have given you some practical hints that will prove of service to you in the future.

THE RÖNTGEN RAYS IN THE TREATMENT OF TUBERCULOSIS.—J. Rudis-Jicinisky (*Amer. Med.*, December 17, 1904) uses the Röntgen rays in conjunction with the regularly accepted treatment, and gives plenty of quinine sulphate internally to ensure better absorption of the rays. Of twenty selected cases of pulmonary tuberculosis, five hæmorrhagic cases showed improvement in ten weeks; ten fibroid cases gave three deaths after a lapse of six weeks; in five cases of mixed infection three patients ceased taking the treatment, but the other two showed continued improvement, with steady gain in weight. In six cases of tuberculosis of the peritoneum one patient died, but the rest recovered, and there has been no recurrence. In glandular tuberculosis there were nineteen failures, eight patients cured, and six benefited; lupus vulgaris, sixteen patients apparently cured, three failures. The greatest improvement was shown in tuberculosis of joints, eight patients with simple tuberculous synovitis were cured in six weeks; four chronic cases showed improvement in four months; one case of tuberculous dactylitis showed good results after six weeks, some deformity remaining; and in two coxalgias the sinuses healed in four months.

CHRONIC FURUNCULOSIS. By Dr. Gaucher (*Med. Times and Hospital Gazette*, December 24, 1904, p. 822).—For chronic furunculosis the author recommends boric acid, which, he says, is efficient in case of chronic boils and is harmless if chemically pure and the dose is not too large. He advises 1 oz. in 33 oz. of water, of which a tablespoonful is taken at meal-times, well diluted. This treatment is alternated with the administration of tar-water and arsenical preparations as follows: One week a tablespoonful of tar-water in half a glass of Vichy water; the next week the boric acid solution, and for the third week a solution of sodium arsenate. This cycle is repeated. If the boric acid is not given well diluted it may cause cramps.

Reports of Proceedings.

ORDINARY MEETING.—Clinical Evening, April 7, 1905

C. M. Tuke, Esq., M.R.C.S., President, in the Chair.

The minutes of the last meeting were read and confirmed.

The following gentlemen were balloted for and unanimously elected: Ambrose Emerson, M.D., B.C.Cantab., 13, Earl's Court Square, S.W.; T. W. Paterson, M.D.Cantab., 42, Holland Park, W.; J. M. Plews, M.R.C.S., L.R.C.P., West London Hospital, W.; W. H. B. Stoddart, M.D., M.R.C.P.Lond., Bethlem Royal Hospital, S.E.

A Case of Acromegaly.

Dr. Seymour Taylor: N. N., female, domestic servant, aged 34, is shown as a case of probable acromegaly. The case has been sent up to my ward from the country as a case of myxœdema. I do not quarrel with the diagnosis, as the patient does present some signs which are at least suggestive of the disease. But a more extended examination led me to the view that the patient was a victim to acromegaly rather than of myxœdema.

The hands, though spatulate, are large (she takes gloves three sizes larger than she did two years ago), and the enlargement is not only in the muscles and fatty tissues, but also, though to a lesser degree, in the bones of the hands. But the skin is not dry; on the contrary, there are signs of free perspiration, with the existence of tinea versicolor on the skin over the sternum. The hair is not dry, and its parting is not widened. There is no myxœdema blush on the cheeks, and the lips are not pendulous, nor flabby and expressionless, as they are in myxœdema.

As stated above, the diagnosis which we arrived at was that the patient was acromegalic rather than myxœdematous. She has a large square face, very large masculine hands, and her feet are above the size which one would expect in a woman, though they are not so comparatively large as her hands. There are no signs, however, of acromegaly in the lower jaw.

She has been treated with tabloids of pituitary gland with markedly good effects, as you can see by comparing her photograph taken on her admission to hospital with her present condition. It is rare to find cases affording such

striking signs of improvement; and it is this marked improvement which tends to confirm our diagnosis.

As regards myxœdema, I have stated elsewhere that the word is a misnomer. There is no "mucous œdema" in this "cretinoid state," and I should prefer to see the disease labelled Gull and Ord's disease, as commemorative of the two physicians who respectively discovered and worked out its clinical symptoms.

Dr. A. E. RUSSELL remarked on the tendency, in some cases of acromegaly, for the disease to undergo spontaneous arrest. In one case under his treatment, of an advanced type, arrest took place after the administration of pituitary extract over a period of twelve months, but he hesitated to attribute this to the treatment. In another case of advanced type the condition had been stationary for the past twelve years.

Mr. H. CHAMBERS: The case is interesting, as it is in probably an early stage of the disease. Cases of acromegaly are generally seen when well marked and the diagnosis not in doubt. They are sometimes discovered accidentally. I recall some years ago being called to fill up a lunacy certificate and finding the patient to be an instance of this disease; she had also dementia, a condition not uncommon in these persons. Thyroid extract was subsequently thoroughly tried and with no good result whatever. Pituitary gland had not then come into use.

Dr. J. BARRY BALL: A few years ago I had a case of acromegaly under my care at the West London Hospital, in which I tried pituitary tabloids without any noticeable effect. Perhaps it was hardly to be expected that any effect would result, as the case was an old standing one and no longer progressing. I hardly think we can expect more than an arrest of progress, such as Dr. Russell observed in his case, under any treatment.

A Case of Congenital Ataxia.

Dr. LEONARD DOBSON: The boy I have shown this evening is aged 8½ years, and has suffered from his complaint since his birth. His mother was confined at the ninth month, had placenta prævia, and the child was delivered with instruments, but was said to be uninjured. As an infant he was very backward, dull and lethargic, and did not seem to take notice of anything. At the age of 9 months he was so puny and miserable in appearance that he was taken to a doctor, who thought he was suffering from rickets. He could not sit up, and if held up fell into a heap, and there was considerable muscular jerking—this was first noticed at about the age of

4 or 5 months. At 10 months of age he was treated for rickets at the Evelina Hospital, for six months. He did not talk or attempt to walk until he was 4 years old. Dentition took place at the normal time and the fontanelles closed at the usual time also. His sleep has always been natural, but he has occasional attacks of night terrors. Muscular movements cease during sleep. He is a bright, intelligent lad, has always been cleanly in his habits and had complete control over the sphincters, and is of good moral disposition.

Mentally he is said to have developed as early and as quickly as other children. His general health has always been very good, and he has had no rheumatism or sore throats. On examination, his organs are all sound, but the testicles are freely movable in the inguinal canals—they can be made to pass into the canals with the slightest pressure. He cannot stand with his eyes closed unless he spreads his legs wide apart, and he walks with a marked ataxic gait. He has great difficulty in feeding himself, and indeed in performing any movements which require co-ordination of different groups of muscles. In addition, he suffers from constant choreic movements of his head and limbs.

Patellar reflexes are increased, pupils react to light as well as to accommodation, discs normal. No nystagmus. He does not seem to have any loss of sensation.

I have brought the case forward with a view to eliciting opinions from gentlemen present as to the nature of the case. I presume he has some lesion in the posterior and lateral columns of the spinal cord; but his symptoms do not quite fit in with this, as he has apparently no loss of sensation and it does not explain the choreic movement of the face. Was this degenerative lesion present at birth or was it started by an injury received at his birth? Finally, I would ask, are there any known methods by which the boy might be educated, so to speak, to gain control over his muscles.

Dr. H. P. POTTER: Much interest attaches to Dr. Dobson's case. I think it would be well to give large doses of arsenic to allay the involuntary and purposeless movements. The cerebral lesion probably affects both sides, for the spasms involve all the limbs and the face. There is evidently some nervous disorder superadded to the ataxia, because the choreic movements are so widely spread.

Dr. ARTHUR SAUNDERS: I quite agree with Dr. Potter that arsenic in large doses might cause considerable improvement in this case. But there is no doubt that here we have to do with a patient suffering from congenital spastic paralysis, due in all probability to meningeal hæmorrhage at the time of birth, so that we should not expect from it the same benefit

as in a case of true chorea. The amount of control that these patients are able by education to exercise momentarily over their movements is quite remarkable, and one of the most severe cases of "congenital chorea" of this kind that I have had under my care was able to earn his living as a billiard-marker and to beat all the members of his club at the game. I may say that in his case considerable benefit was derived from the exhibition of hyoscin in increasing doses up to $\frac{1}{75}$ gr. three times a day. This he found to control, though it did not abolish the movements.

Dr. G. E. SHUTTLEWORTH: In these ataxic cases there is often a considerable degree of intelligence which may be utilised in connection with training. By judicious muscular exercises, first of the larger, then of the smaller muscles of the limbs, a degree of inhibitory and co-ordinative power may gradually be developed, as such patients evince sufficient strength of will to co-operate in what is being done for them. I had formerly a patient of this class at the Royal Albert Asylum, Lancaster, diplegic and with double athetosis (attributed to birth injury), who when admitted at 12 years of age was even unable to hold a pencil, but after suitable training, both mental and physical, learned to draw and to write, and subsequently to use tools in the carpenter's shop. Having a taste for decorative work he subsequently learnt wood-carving, and it was very interesting to see how, by persevering and determined efforts, he gradually attained power to handle mallet and chisel in an effective way, so that finally he became an expert wood-carver, and has for for some time past been employed as a teacher of wood-carving at the Asylum. Such a case is encouraging as showing how much may be done to overcome ataxic movements by judicious exercises, which strengthen will power as well as promote muscular co-ordination.

Dr. L. DOBSON: In reply, I have to thank those gentlemen who have given me hints as to treatment. I intended to try arsenic, but waited to hear the opinions of those present. I shall therefore now put the lad on a course of arsenic in large doses.

I thoroughly agree with Drs. Shuttleworth and Johnstone that most benefit will be derived from exercises and instruction with a view to teaching the boy to exercise his will in the control of his muscles. Undoubtedly if this could be carried out he would greatly improve, but unfortunately I do not know of any institution where this education can be attained except at great expense. At the present moment the boy is attending the County Council's special school for cripples, where they are endeavouring to carry on his education on these lines.

Note on June 6: The boy has now been on 15 m. of liq. arsenicalis daily for two months, and the choreic movements are greatly lessened. The muscular inco-ordination persists unchanged.

A Case of Chronic Middle Ear Suppuration; Thrombosis of Lateral Sinus; Operation.

Dr. J. BARRY BALL: C. C., a girl, aged 8, was admitted to the West London Hospital on February 11, 1905. She had measles five years ago, and since then had a constant fetid discharge from the left ear. Dr. Seccombe, of West Drayton, who sent the case to the hospital, reported that the child had been ill for a week with a fever and pain in the left ear and side of head, and on the previous day had had a rigor and sharp rise of temperature to 104°, followed by profuse sweating. On admission she complained of pain behind the left ear. There was fetid pus in the meatus. The greater part of the membrana tympani was destroyed. There was no tenderness or œdema over the mastoid region. There were some enlarged glands under the upper part of the sterno-mastoid and below the angle of the jaw on the left side. The temperature on admission was 103°, but had risen to 104·8° an hour afterwards.

The symptoms appeared to be clearly due to some complication of the middle ear suppuration, probably thrombosis of the lateral sinus. It was therefore decided to operate at once. The ordinary radical mastoid operation was performed. There was no gross evidence of disease of the walls of the antro-tympanic cavity, or of the mastoid process. The lateral sinus was now exposed behind the mastoid antrum, and was laid bare for about $\frac{3}{4}$ of an inch of its course. The wall of the sinus presented no evidence of disease, but no pulsation could be felt. An incision into the sinus revealed the presence of clot. The incision was freely enlarged. The clot was found to be broken down and pale in places, but there was no actual pus. On removal of the fragments of clot from the upper end of the incision free hæmorrhage occurred at once, and this end was plugged. Removal of the clot from the lower end, for some distance down, failed to establish hæmorrhage. The sinus was evidently thrombosed as far as the jugular bulb at least. I then decided to ligature the internal jugular vein. The vein was exposed and was found to be normal and quite free from thrombus. Two ligatures were applied about the level of the bifurcation of the carotid, and the vein was divided between them. Some further portions of clot were then removed from the sinus, in the direction

of the jugular bulb. The wound behind the auricle and that in the neck were left freely open and dressings applied.

For eight days after the operation the temperature was more or less elevated, and on February 14, 15, 16, and again on the 18th, it rose above 103°. After this it did not rise above 101°, and after February 26 it did not rise above the normal. The wound in the neck over the jugular vein suppurated a good deal, and there was some burrowing of pus requiring counter-openings. The mastoid wound suppurated for some days, but soon began to look clean and to heal in a normal manner. Two days after the operation the right elbow-joint was noticed to be painful and swollen. This joint was eventually opened by Mr. Swinford Edwards on February 17, and pus evacuated. After this it rapidly healed. On February 20 she complained of pain in the left hip. This joint remained painful and stiff for about a fortnight, and ultimately a splint and extension weight were applied. These were removed in a week, and she did not complain further. On March 21 she was quite convalescent, and was allowed to get up. The post-auricular opening had closed four weeks after the operation, and the surface of the antro-tympanic cavity is now (eight weeks after the operation) nearly dry and largely lined with epidermis. When I attempted to clear out the clot from the sigmoid sinus it was not my intention to tie the jugular vein if free bleeding had been established from below. However, it is a question whether, in all these cases, as soon as a thrombosed sinus is known to be present, the vein should not be tied, and the removal of the clot performed subsequently. The balance of opinion seems to be in favour of this course. The course of the case for the first week or ten days pointed to the pyæmic process not having been completely arrested by the operation. It is not clear what the trouble in the hip-joint was—whether some slight infection or not.

Mr. J. G. PARDOE: I think the members of this Society will congratulate Dr. Ball on the successful result obtained in this case. They always seem to me amongst the most harassing and anxious cases a surgeon can have to deal with. The only point upon which I should like a little light is, whether cultures were taken from the jugular vein, the sinus, or the elbow-joint, and what was the organism discovered; also, whether an appropriate serum was used to combat the pyæmic infection? I thing that such a course is strongly indicated in all these cases of septic infection.

Mr. E. P. PATON: I did not quite gather from what Dr. Ball has told us what were the points which led to the diagnosis of thrombosis of the sinus. In my experience the

determination of the existence of this complication of middle ear disease is often fraught with very great difficulty, more especially as active suppuration in the mastoid may give rise to rigors and other signs of pyæmic trouble when the sinus is quite normal. This was the case in a patient under my care recently, in whom both mastoids exploded most acutely within a few days of the tympanum becoming affected from an acute infection of the throat of undetermined origin. This case had to have both mastoids cleared out, but ultimately settled down after giving very considerable anxiety for about a fortnight.

Dr. J. B. BALL: I regret that in condensing the notes of the case I omitted to mention that two injections of antistreptococcic serum (10 cc. each) were given during the first week after the operation. There were no cultures made from the thrombus, or from the pus from the elbow-joint. With regard to the indications which made me explore the lateral sinus, I was led to do so by the absence of anything in the middle ear, antrum, or mastoid bone to account for the high temperatures.

A Case of Congenital Heart Disease.

Dr. ARTHUR SAUNDERS: This girl, aged 15, is suffering from congenital heart disease. Though dusky in complexion, and with marked clubbing of her fingers and toes, she does not present the extreme degree of cyanosis that is sometimes seen.

She is the eldest child of a family of six, and is said to have been born at full term. There is no history of heart affections or of acute rheumatism obtainable in other members of the family, though her father is stated to suffer from "rheumatic gout." She is said to have been always small and blue; though now 15, she is but 4 ft. 9 in. in height, or some three inches below the average.

The point that is of chief interest about her is the peculiar character of the murmur. This is best heard at the pulmonary base, and is almost, if not quite, continuous, lasting throughout both systole and diastole, though with marked accentuation during the former. It is somewhat faintly heard, but of a deep roaring character, and has been compared, by those who have listened to it, to the respiratory murmur, to the uterine souffle, to the echoings in a shell held to the ear, or to the breaking of the waves on the shore.

Both ventricles are hypertrophied, and the second sound at the pulmonary base is accentuated. It is impossible, I think, to say definitely what the lesion is in these congenital cases, but from the blueness of the child I have but little doubt that

admixture of venous and arterial blood here takes place, either from communication between the chambers of the heart itself, or between the pulmonary artery and aorta.

Dr. SEYMOUR TAYLOR: In congenital heart disease, my experience tells me that it is useless to draw from the site and quality of any murmur any diagnostic conclusions as to the actual existing defect. We can only conjecture that there is an incomplete interventricular septum—or a patent foramen ovale—or some communication between the aorta and one or other of the venous trunks. The continuous murmur which occupies the whole period of the heart's cycle in this case rather favours the latter conclusion, so far as I can judge; but I can only repeat that accurate diagnosis is out of the question, and it often happens that the least skilled observer makes a lucky shot in diagnosis, whilst his more experienced *confrère* is found to have been in error.

Two Cases of Progressive Muscular Atrophy.

Dr. A. E. RUSSELL showed two men with muscular atrophy of progressive type. They were cousins. The grandfather, who also suffered from the same disease, had four sons and five daughters. In none of the sons, nor among their children, was there any example of the disease. The five daughters were unaffected, but in each of their families one son was affected, and in one a grandson (through an unaffected daughter). This history was interesting, as although the grandfather and the grandfather's brother were affected the next generation escaped the disease, which then reappeared in the grandsons.

One of the patients (aged 40) first noticed weakness in feet and legs at the age of 20; the peroneal and anterior tibial muscles slowly atrophied. Some seven years later the hand and forearm muscles began to atrophy. At present he showed extreme atrophy of hand muscles with claw position; forearm muscles also much atrophied. Upper arm muscles normal, knee-jerks brisk. No clonus and no Babinski's sign. No sensory disturbances. In the other (aged 32) the disease started nine years ago; first in the legs, and three years later in the arms. His condition is very similar to that of the first. Both were able to earn their livings, one in the store-room of an engineering works, the other as a bootblack.

Tumour of the Tongue.

Mr. J. R. LUNN: Angelina B., aged 12, admitted into St. Marylebone Infirmary, W., on February 10, 1905, complaining of a lump in her tongue, which she says she has had six

months; it causes her no pain or trouble. On the dorsum of the right half of the tongue is observed a swelling, over which the papillæ are markedly hypertrophied. This swelling extends backwards, shelving off and then rising into another similar but smaller one further back. On palpation the swellings are found to consist of thick tissue, but there are no definite nodules, the remainder of the tongue on the right side is thickened. There are no secondary enlarged glands. The teeth are not typically syphilitic; the lower bicuspids are somewhat conical. The bridge of the nose is depressed. No osseous lesions. Suspicious scars at the left angle of the mouth. Well-marked interstitial keratitis.

Four other children quite well. The mother has had no miscarriages.

A Case of Chronic Glossitis (Syphilitic).

Mr. J. R. LUNN: Agnes D., aged 39, mother of six children, four are dead. No miscarriages.

Past History.—Five years ago she broke out in sores on her body and limbs, also had a sore throat. Three years ago her tongue became swollen and raw and was covered with blisters.

Present Condition.—She has a few infiltrated patches on her lips and cheeks and by the side of her nose. White scars on her arms, legs and body, also on her nose. She has some difficulty in protruding her tongue, which is glazed in appearance, there being an absence of papillæ. The dorsum and sides are marked by irregular cracks and fissures, and the whole organ is hypertrophied and thickened in patches. On the dorsum are heaped-up patches (nodules) in the posterior half of that surface. No enlarged cervical glands to be found. She has had large doses of iodide with mercury inunction.

Tumour in Tongue of Girl.

Mr. E. P. PATON: We are much indebted to Mr. Lunn for giving us the opportunity of seeing this case, which is one of a good deal of interest. I do not think there can be very much doubt that it is an example of lymphangiectasis and is of the same nature as those cases which give rise to such an enormous enlargement of the tongue as to be called macroglossia. This particular case does not happen to show what is often a very characteristic feature, namely, the appearance of small vesicles on its surface, which are usually of a pink or white colour and have an almost waxy appearance. I should not recommend any treatment being adopted for this case unless the swelling very much increases in size.

A Case of Mongolism.

Dr. ARTHUR SAUNDERS: This little girl, aged 2 years and 5 months, is an instance of the type of congenital mental deficiency known as Mongolism. She shows well the characteristics of this condition. She is a small child with a short, round head, the circumference being only seventeen inches, with marked flattening in the occipital region and an enclosed anterior fontanelle. The face is broad and flattened and the eyes, which lie far apart—the intercanthic interval is $1\frac{1}{8}$ inches—are set in slightly oblique and almond-shaped palpebral apertures.

In this case there is no epicanthic fold, nor is there either strabismus or nystagmus. The ears are small and round, the nose is flattened and the bridge depressed, the chin is small. The skin is not, as in some cases, coarse and rough, but smooth and elastic. The cheeks are red, the complexion clear, and the hair, which is fair, is fine, soft and abundant.

On opening the mouth the palate is seen to be high and arched, the fauces are narrow and the naso-pharynx is small. Adenoids were present when the child was first seen a month ago, and breathing through the nasal passages, blocked with these growths and affected with catarrh, was seriously interfered with. The mother stated that the child had suffered from "snuffles" ever since she was a month old. The adenoids were removed by Dr. Ball, and nasal breathing has since then much improved. The nasal septum presented no defect. The hands and feet of the patient are short and broad, the fingers are short with rounded tips. The little finger is here not crooked. The ligaments of the joints of the body generally are lax. The child cannot yet walk though she can just stand when helping to support herself by means of her hands. She is not yet able to talk. She has cut ten teeth. In most of the cases the circulation is feeble, and in several cases definite congenital heart disease is present. The child, who was born at the end of eight months, is stated by the mother to have been "blue for a week after birth." There is now no murmur present, though the circulation is feeble. The mother stated that the child often "goes blue with cold," and it was for chilblains—a frequent affection in these cases—that the child was brought to the hospital. The child also has suffered, according to the mother, from attacks of stupor when lying down. She is said at times to "be blue and stiff for some twenty minutes," after which she is difficult to arouse. These attacks are probably epileptiform in nature.

The family history is of interest. The father of the child is twenty-five years older than the mother and they were

married for eleven years before a child was born. The first child, a boy, died of meningitis at 3½ years. A miscarriage occurred between this birth and the birth of the patient. There has been one child, a girl, since the patient was born. This child is, like most Mongols, quiet, placid and cheerful. She is frequently making grimaces, pouting the lips, champing the jaws or moving the mouth from side to side. At times she practises "salaaming movements," bowing to and fro repeatedly as she sits in her cot, or moves her shoulders up and down or throws her limbs about. There is a general tendency to restlessness.

Dr. G. E. SHUTTLEWORTH: The Mongolian idiot which Dr. Saunders has shown is a good example of that interesting type of congenital defect which the late Dr. Langdon-Down designated *Mongolian* in consequence of certain physiognomical resemblances to the Mongolian rather than to the Caucasian variety of the human race. With these physiognomical characters he traced also certain mental characteristics which he considered more common in the Mongolian than in the Caucasian family, *e.g.*, imitative facility but lack of power of initiative. However, in the light of recent history it may be necessary to modify this estimate of Mongolian mental character; it is certain that this particular type of defective children of Caucasian parentage do exhibit these mental peculiarities, they are often good mimics, apt in merely imitative exercises (*e.g.*, in music and drill and capable of being taught drawing and writing, and simple mechanical work), but deficient in all that requires original thought, and consequently as a rule only capable of a very limited amount of educational attainments. Physically it is interesting to note that not only the cerebrospinal system is ill-developed but all the textures of the body are faulty; thus, if time permitted, we might trace abnormalities in the osseous, muscular, vascular and tegumentary systems. Dr. Saunders has well referred to them etiologically as "products of exhaustion," and it might be added that the result of that reproductive exhaustion was to bring into the world these children in a state of practical immaturity, which was indeed their permanent condition through life. With certain superficial resemblances to sporadic cretinism there were very essential differences between the two conditions which it was important to recognise from the points of view of diagnosis and treatment, as thyroid treatment might, if unwisely pushed with a Mongolian patient, do positive harm by depressing an already debilitated circulation.

ORDINARY MEETING.—Friday, May 5, 1905.

C. M. TUKE, Esq., M.R.C.S., President, in the Chair.

The minutes of the last meeting were read and confirmed, after which the following gentlemen were balloted for and duly elected as members of the Society: James Taylor, M.D.Edin., F.R.C.P.Lond., 49, Welbeck Street, W.; W. R. Tomlinson, L.R.C.S., L.R.C.P.I., 57, Airdale Avenue, Chiswick, W.; Ernest F. Travers, M.B.Lond., M.R.C.S., L.R.C.P., 2, Phillimore Gardens, W.

Dr. JAMES TAYLOR read a paper on "Some Points in the Treatment of Epilepsy and Allied Disorders." He referred to infantile convulsions, night terrors and somnambulism as disorders allied to epilepsy. Infantile convulsions he regarded as divisible into two classes—

(1) Those resulting from gross organic changes, such as (*a*) meningeal hæmorrhage, &c., occurring at birth and giving rise to convulsions, dating from very early life, and (*b*) acute encephalitis causing infantile hemiplegia, usually ushered in with a series of unilateral convulsions and giving rise to a condition in which convulsions are apt to recur.

(2) The second class is that in which no gross lesions are discoverable and the usual underlying condition is that of rickets. These convulsions are of importance because of the tendency apparently imprinted on the unstable cortical cells to give rise in later life to "discharges," which are those recognised as epileptic fits. Hot baths gradually cooled down, calomel and bromides by the rectum, are the measures most useful in the early stages of such illnesses.

A brief reference was made to somnambulism and night terrors and the intimate connection of at least some of these cases with true epilepsy.

In reference to epilepsy, Dr. James Taylor thought the cases might be divided, for convenience, into classes—not a botanist's classification, so to speak, but rather that of the practical gardener.

(1) Those recurring irregularly, in which the treatment must be regular and sustained.

(2) So-called nocturnal fits, mostly occurring during sleep, not necessarily in the night. These are best treated with one large dose of medicine at night.

(3) Those occurring in the early morning after getting up, best treated by an early small meal in bed, followed by a dose of medicine.

(4) Senile epilepsy, the first fit occurring at or about the commencement of the degenerative period.

(5) Cases of *petit mal*, the most intractable of all.

Reference was made to the effect of acute disease in leading to temporary cessation of fits, and also to the effect of pregnancy, frequently leading to cessation during the pregnancy, occasionally not influencing the disease.

In reference to drugs, bromides are regarded as the "sheet anchor." They have to be administered regularly. In nocturnal and senile cases the addition of digitalis was useful, probably because in such cases the instability of the cells was the result of interference with the nutrition of the cells by the blood-vessels. The addition of nux vomica to the bromide, in all cases, was recommended, with the view of preventing the depression which bromides alone are apt to induce. Bromide of zinc, belladonna, &c., are especially useful in cases of *petit mal.*

The PRESIDENT: I am sure that we are all glad to welcome Dr. James Taylor, and we thank him for reading a paper on this subject, in which he has so great and varied an experience. Personally I was greatly interested—the remarks on the epilepsy of childhood and some of the classifications of the disorder were new to me. We have possibly seen cases of "night terrors" of various gradations, when the connection with epilepsy was not apparent, perhaps, and they have been treated with success without special treatment directed to that disease. In cases of epilepsy with insanity, with which I am more familiar, we are face to face with a very formidable disease. I have seen cases of chronic insanity in which epileptic attacks have appeared at or about the age of puberty, and have not again occurred till past middle age. In this most serious form of insanity with frequent epileptic attacks and the occurrence of mania at intervals, we see a gradual weakening of the intellectual processes. It is in these cases that one may feel a doubt as to whether one ought not to restrict or modify the diet, and one finds the patient often unreasonable and irritable and apt to resent any such interference. I should be glad to know whether Dr. James Taylor would advise that such modification or restriction is unnecessary.

We know that here and in other countries many curious drugs have been tried in the treatment of epilepsy, but it appears that none are so reliable as the bromides. I again thank Dr. James Taylor for his paper, and invite the members present to discuss it.

Mr. F. G. LLOYD: I have listened with great pleasure and interest to Dr. James Taylor's Paper on "Epilepsy." I should like to ask him a few short questions bearing on that subject:—

(*a*) In some of the chronic cases of the more intellectual

type of patients there is sometimes a great craving for alcohol. Can Dr. Taylor suggest from his experience any special drug or treatment to counteract that craving.

(*b*) In cases where the fits are as many as five to thirty or more in twenty-four hours, and sometimes continuing for days in the more serious type of epilepsy, can he recommend any drug or drugs for procuring sleep.

(*c*) I should like to ask if his allusion to ordinary diet included the treatment previous to, during, and after the severe type of case.

Dr. C. H. BENNETT: I would ask Dr. James Taylor if he could tell us of any cases that had got well under the bromide and digitalis treatment. I should like to mention a case that I had under my care, who suffered from very severe epileptic fits for years which I completely cured by giving her small doses of strychnine three times a day for three or four years. She subsequently went to America, but returned to England and lived at Wimbledon, where she died about two years ago. She had not had a fit for three years before leaving for America, and there had not been any fits up to her death, a period of between five and six years, during which time she had not been treated for epilepsy in any way whatever.

Dr. A. GASTER: I should like to ask Dr. James Taylor with regard to the treatment of epilepsy by bromides, what are the doses he has found most beneficial in the different forms of epilepsy described by him, and for how long a time he advises a continuation of such treatment. May I ask Dr. Taylor whether in his experience of the treatment of epilepsy he has found any difference in the action of the bromides in cases where salt has been entirely omitted from their diet, as recommended by others who claimed that a greater absorption of bromides takes place and hence an intensifying action and quicker effect.

Dr. TAYLOR briefly replied to the observations of several speakers.

Mr. J. HOWELL EVANS gave an address on "Certain Intra- and Extra-cranial Lesions Produced by Injury at Birth, their Causation, Progress and Treatment" (see p. 188). This address was illustrated by lantern slides.

ORDINARY MEETING.—Friday, June 2.

C. M. TUKE, Esq., M.R.C.S., President, in the Chair.

The minutes of the last meeting were read and confirmed, after which the following gentlemen were balloted for and duly elected as members of the Society: Joseph Corbett Muir, M.D.Cantab., M.R.C.S., L.R.C.P., St. George's Infirmary, Fulham Road, S.W.; Henry Edward Barrett, M.R.C.S., L.R.C.P., 123, Holland Park Avenue, W.

Dr. W. H. B. Stoddart read a paper on "The Recognition and Treatment of Mental Disorders in Private Practice," see p. 191.

Mr. C. M. TUKE: I have to thank Dr. Stoddart in the name of the Society for a paper of much interest and practical utility. His statistics show that these cases are frequently occurring in every-day practice. I congratulate Dr. Stoddart on raising many points of interest to the general practitioner, and for giving many useful suggestions. I feel that the occurrence of an acute case of insanity in general practice is the source of great anxiety and immense trouble to the family medical adviser, who may be called upon to spend much time on the requirements of an unusual and exacting case, to the detriment and disturbance of his practice. What too often happens is this: in an acute case, at first the relatives are unwilling to recognise the mental disorder, and object to the very name of any medical man being called in who is experienced in lunacy; but under the advice of a neurologist, the case is called one of neurasthenia or something of the sort, and an attempt is made to treat it at home. Nurses more or less qualified and experienced are procured, and generally unnecessary restraint is employed, till eventually the situation becomes impossible, and the patient is at last removed to an asylum, described as being violent and homicidal, after valuable time is lost. Then, the restraints and sources of irritation being removed, the course of his illness begins to tend towards recovery.

I agree with Dr. Stoddart that early treatment is necessary. In connection with this we hear of the establishment of special hospitals for recent cases, and in some special cases this may seem desirable. But it is often forgotten or never mentioned that facilities for this exist under the present legislation, and that patients can be admitted for treatment without delay on certificates in lunacy as "voluntary boarders" into asylums, hospitals and licensed houses. Patients themselves may be unwilling or unable to recognise their own condition, and thus may refuse these facilities, but they would equally refuse treatment in a special hospital. Personally, I have found the

system very useful, especially in the case of patients suffering from recurrent attacks, who will frequently hasten to place themselves under care as "voluntary boarders," when conscious of a new attack impending.

I agree with what Dr. Stoddart has said about treatment by travel. This is sometimes most injudiciously advised by the neurologist, and lately I have seen a general paralytic ordered a yachting voyage in the Mediterranean Sea, to the obvious excitement of the patient and great expense to the family. No doubt many cases are suitable for private care; it is often, however, difficult to judge this. In any case I think that they should be under the care of a medical man, preferably one with some experience of such cases, and under certificates. Treatment by laymen and other inexperienced persons is undesirable and in fact generally improper, as the patients do require medical treatment, and should get it.

There is no doubt that there are many persons going about the world who are insane; while in some cases they are harmless, there is no doubt that they are often a source of danger to the public, and the reports in the papers show that there is an increase in the number of suicides. Some of these latter cases might have been cured if their early manifestations had been observed, and it is at all times desirable to notice the existence of delusions, especially of persecutions and the like.

Dr. Stoddart's remarks on treatment are very practical. Attention to the condition of the digestive organs is often necessary, and I have frequently seen enemata most useful.

Sleeplessness is often a formidable symptom, especially in acute mania. I find paraldehyde reliable, and I think Dr. Stoddart did not mention the use of alcohol and warm baths, and at times the wet pack may be tried with advantage.

Dr. Stoddart mentioned chloroform, and I remember I first saw this used in a case of acute mania after amputation of the breast, when the patient slept for some hours on several occasions after chloroform had been given in order to dress the wound. I would not hesitate to use this if the occasion arose. Cases may frequently occur when food is refused and at the same time is essential to the patient. It should, I think, be administered by the doctor himself and not by the nurses, and either the oral or nasal tube should be used as may be convenient. I object to the use of "hyoscin"; it certainly overpowers the patient, but I do not consider it to be in any way curative. I would advise medical practitioners not to be afraid of writing certificates; the certificate should be short and not necessarily technical, but should simply record some symptom of insanity observed by the writer. Some magistrates

hold that it is necessary to add information given by others, but though this really is not necessary to legalise the certificate, it is generally easily procurable and may therefore be added.

I again thank Dr. Stoddart for his paper, and apologise for having spoken so long on the points raised, while other members are no doubt ready to continue the discussion.

Dr. S. D. CLIPPINGDALE: It seems to me the Society is doubly fortunate in possessing a member so well qualified to give us the valuable paper we have just listened to and a President so well qualified to discuss it. Dr. Stoddart, in dealing with cases of anorexia nervosa, tells us he adopts the gag and stomach-tube method of feeding the patients. This method is not always applicable in private practice, and one has found that rectal alimentation is as successful and better tolerated. In dealing with borderland cases of lunacy in private practice it is always difficult and anxious for the family doctor to decide when to "part" with the patient, from a desire to save, as long as possible, the family escutcheon from the "bar sinister" of insanity. If, however, he defers too long this painful and, as a rule, inevitable step, he runs the risk of his uncertified patient falling into the hands of the authorities and being sent to a public asylum.

Dr. A. B. KINGSFORD: I should like to ask Dr. Stoddart whether he objects to giving hyoscin by the mouth as much as he does to giving it hypodermically, and also whether his objection to hypodermic injections of hyoscin applies especially to alcoholic cases? I was taught (by a teacher of psychological medicine in London) that the administration of hyoscin (hydrobromide) by the mouth is a good treatment in cases of acute mania; the lecturer backing his opinion by quoting a case in which he had given $\frac{1}{60}$ gr. (*per os*), with the result that the patient slept for about thirty to thirty-six hours and woke up a sane man. On the other hand, I once gave a hypodermic injection of $\frac{1}{200}$ gr. hyoscin hydrobromide to a man who had *delirium tremens* (by no means his first attack), with the result of drying his skin and causing an alarming degree of depression.

Dr. H. P. POTTER: I should appreciate Dr. Stoddart's opinion on the respective advantages of nasal and oral feeding in melancholia, for my experience has led to the conclusion that forcible feeding by the mouth is preferable. By this method there is less likelihood of the introduction of food into the glottis, which may set up pneumonia, and regurgitation is infrequent. Carefully and slowly carried out oral feeding, in my opinion, has every advantage.

Dr. H. CAMPBELL POPE: I congratulate Dr. Stoddart on the latter part of his paper, in which he put forward some

therapeutic hints of great value, notably, the difference in action between paraldehyde and trional. There is also a hypnotic now seldom used, but also of great value in certain cases, namely, those in which insomnia occurs, owing to a rapid succession of ideas crowding through the mind—I allude to urethane. I could not congratulate Dr. Stoddart so fully on his experiences with general practitioners, and am sure he will not find them all devoid of knowledge in mental disorders and treatment. There is one point I should like to insist on in connection with cases of neurasthenia, so-called, which frequently come before us; cases where people are afraid to do some simple action, such as crossing the road, or are unable to write their name or carry a cup or glass safely to their mouths, if any one is looking at them; in such cases always examine the urine, and in many, if not most of them, you will find a dark discolouration of the urine with Fehling's solution, followed by a black precipitate. This precipitate I take to be copper sulphide, but I am not chemist enough to know the origin of the sulphur, I think it possible that it is due to loss and decomposition of lecithin from nerve tissue. Although it is quite likely that many cases of neurasthenia, anorexia nervosa and kindred neuropathies should be classed as mental diseases, I hope Dr. Stoddart will not advocate their removal to special institutions, for what between nursing homes, massage homes, institutions endowed with high frequency chairs, practising midwives, "*et hoc genus omne*," the general practitioner will soon find that "his occupation is gone," especially (though slang is condemned by the lecturer) if our "dotty" patients are taken from us. I believe much good may be done in early cases by change of scene, in company with an experienced and cheerful attendant.

The Mirror of Practice.

CASE OF EXTRAUTERINE FŒTATION.

By A. Elliot, M.D.

Mrs. H., aged 28, was first seen on September 21, 1904. She complained of abdominal pain and loss of blood from the vagina, which she attributed to a prolonged ride in a jolting vehicle. On enquiry it was found that there had been amenorrhœa for two months, and the patient believed herself to be pregnant. She had been married for seven years and was childless. She had suffered from dysmenorrhœa, together with irregular menstruation, for some seven or eight years, for which she had undergone a variety of treatment. Three years previously there had been a possible miscarriage at the seventh week, but no very definite account of this occurrence could be obtained. Absolute rest in bed—the patient when seen was going about—was enjoined. A few hours later the pain and hæmorrhage, neither of which had been severe, had much decreased, and in forty-eight hours both had entirely ceased. Next day the patient, contrary to instructions, got up and went about as usual.

On September 30 there was a return of the hæmorrhage, but without pain or discomfort; and on October 2 a cast of the uterine mucosa was passed. Sections of this cast, prepared by Dr. J. P. Candler, showed no evidence of chorionic villi. Physical examination was difficult by reason of unusual rigidity of the abdominal wall, but the uterus was found to be somewhat enlarged, and the cervix distinctly softened. The breasts were enlarged and tender, the areolæ darkened, and a thin milky fluid could be expressed from the nipples. The hæmorrhage varied from day to day, but on the whole steadily decreased in amount, and by October 8 had ceased altogether. Two days later, on account of renewed bleeding, I determined to make a more careful examination under an anæsthetic; and as the patient had been formerly under the care of Dr. Drummond Robinson, I asked him to see her with me. We examined her together, under chloroform, and found, in addition to the conditions above noted, a swelling about the size of a small egg in the left fornix. The diagnosis now seemed clear, but unfortunately a similar swelling had been noted by Dr. Robinson at a previous examination some two years earlier. The general symptons, however, pointed so strongly to extrauterine fœtation that we determined to keep the patient in bed, and to await developments. The con-

dition and its possibilities were explained to her and to her husband, and, with their co-operation, preparations were made for immediate operation, should the necessity arise.

On the morning of October 19, four weeks after the case first came under observation, while turning over in bed the patient was suddenly seized with severe pain in the lower abdomen, accompanied by faintness and by some blanching of the face. On examination half an hour later the pulse and temperature were natural, and there was nothing in the general appearance of the patient to call for remark. There was, however, very distinct hypogastric tenderness—an entirely new symptom—and a general review of the whole circumstances of the case determined me to ask Dr. Robinson to operate without further delay. As soon as preparations were completed Dr. Robinson opened the abdomen, Dr. G. P. Shuter kindly giving the anæsthetic. The peritoneum was found to contain about a pint and a half of free liquid and coagulated blood, which had evidently come from a rupture of the distended left tube. No trace of a fœtus could be discovered. The tube and ovary were ligatured off in the usual manner, and removed, the pelvic peritoneum sponged clean, and the abdominal incision closed in three layers. The after-history of the case was uneventful, and the patient made a complete recovery.

The following points in the case record seem to me to be of special interest: (1) The patient had suffered for many years from uterine, or at all events pelvic, trouble; she had been married for some seven years and was sterile. As pointed out by the late Mr. Lawson Tait, this combination is a common history in cases of extrauterine gestation. (2) The onset was not to be distinguished from an ordinary threatened abortion, but the subsidence of the hæmorrhage, and its reappearance at irregular intervals without pain, and especially when accompanied by the passage of a uterine cast showing no fœtal structures, pointed to the real nature of the case. (3) The only circumstance leading to doubt in the matter was the fact that a tumour had been noted on a previous occasion in the same situation as that discovered during the course of the illness. But for this there would have been less difficulty in coming to a conclusion as to the real nature of the swelling, which proved to be, as suspected, a distended gravid tube, and operation might have been undertaken before rupture actually took place.

Hospital Notes.

By A. Elliot, M.D.

Notes of a Case of Cerebrospinal Meningitis.

Grace F., aged 6½, was admitted to the West London Hospital, under the care of Dr. A. P. Beddard, on March 19, 1905. Three weeks previously she had attended as an out-patient. Her illness began by "sore throat," which was rapidly recovered from, and for some ten days she had been kept under observation as she was reported to have swallowed the spout of a small china teapot, but of this there is no direct evidence. On the day before admission the child was apparently quite well and going about as usual when she was suddenly seized with abdominal pain accompanied by vomiting and diarrhœa. The bowels were opened three times and the motions were offensive.

A history of rheumatism and consumption on the mother's side was obtained, otherwise the family history was unimportant. There were seven other children in the family, all of whom were "delicate," but no definite illness was noted. There was no evidence of syphilis in the family.

The patient had never been a strong child. She had had chicken-pox and measles, and, following the latter, double suppurative otitis media. The mother stated that the ear discharge had ceased about two years previously, but that she had from time to time since then syringed both ears because of slight return, the last time being six or seven months before admission. There was also a history of vaginal discharge, but no evidence of this condition was obtained during the child's stay in hospital.

On admission, the child was pale and collapsed. The heart's action was rapid and the sounds feeble. No radial pulse could be felt. The abdomen was flat, and pain and tenderness were complained of in the lower part. It moved freely on respiration; there was no abnormal dulness and no tumour could be felt. The spleen was impalpable, the liver slightly enlarged. The lungs were natural, and the child was quite conscious and sensible. During the night the diarrhœa and vomiting continued, and next morning the general condition was worse, requiring increase of stimulant and, later, subcutaneous saline infusions. The collapse passed off, but increasing nervous symptoms set in. There were occasional mild convulsions, squinting, and a tendency to rotate the head and eyes to the right. The child became progressively less and less sensible and by evening was delirious and crying out. The convulsions were now most marked on the right

side. Nasal feeding was necessary and the bladder had to be emptied by catheter. It was thought there was more tenderness over the right mastoid than over the left, and the child seemed to be suffering pain on that side, but the right membrana tympani showed nothing abnormal. There was a distinct perforation in the anterior inferior quadrant of the left drum.

The diarrhœa and vomiting lasted thirty-six hours in all; the convulsions ceased, but there was no improvement in the general condition. The child was quite unconscious and could not be roused, the squint continued and head retraction appeared. The knee-jerks were slightly exaggerated and Koernig's sign was positive. Next day slight commencing optic neuritis was visible.

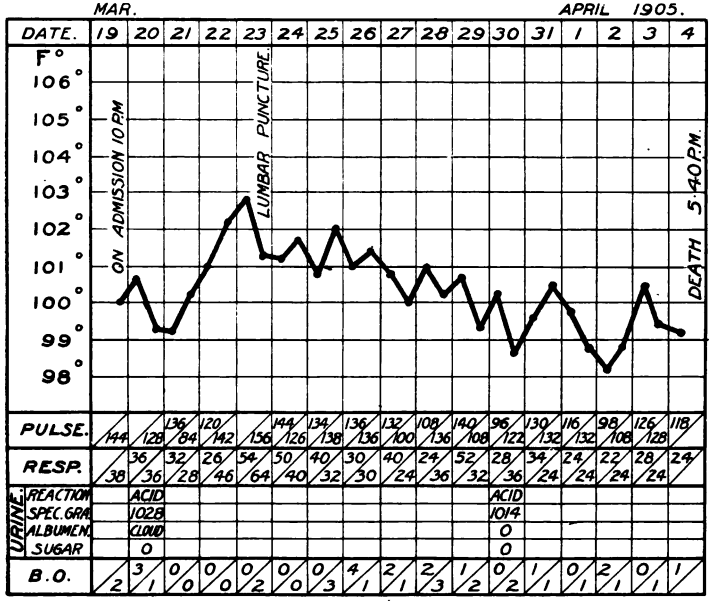
On March 23 lumbar puncture was carried out, about ʒii. of somewhat turbid fluid being run into a broth culture tube, a cover-glass preparation being made at the same time. The smear showed an intracellular diplococcus, and from the broth tube a pure culture of the same was obtained. This could not be distinguished from the *Diplococcus intracellularis meningitidis*.

On March 24 the following note was made: "The patient is more conscious to-day; she has asked for tea, speaks rationally at times and seems to understand partially what is said to her. There are no general convulsions and no definite paralysis or rigidity of the limbs, but twitching and tremors of the arms and hands are constant. The spine is slightly rigid and there is distinct head retraction. Knee-jerks present, but feeble; Koernig's sign present. Micturition and defæcation are involuntary. The heart shows a faint basic systolic murmur, and the lungs, except for a few crepitations at the base, are clear. There are two petechiæ on the front of the right shin. There is a bluish-red swelling over (1) the anterior aspect of the lower end of both radii, (2) over the dorsum of each carpus, (3) over the dorsal aspect of the right fifth metacarpophalangeal joint, (4) over the front of each ankle-joint. None of these fluctuate. Both knees are reddened and swollen and the superficial veins are enlarged. The right knee-joint contains fluid." Next day the fluid in the knee-joint had increased, and a similar condition was discovered over the metacarpophalangeal joint of the left great toe.

By March 26 the general condition had distinctly deteriorated; the child was more difficult to rouse and was rapidly losing flesh. There were continuous twitching tremors in the arms and legs, but no paralysis or rigidity. Sensation was apparently normal, but it was difficult to exclude hyperæsthesia. The eyes now acted quite independently, but at

times there was conjugate deviation as well as head rotation to the right. The spine was more rigid. Knee-jerks both present. Koernig's sign present on both sides. A third petechial spot appeared on the leg. The swellings over and effusions into the joints were distinctly less marked, especially so in the legs, and no fresh ones had appeared.

During the next few days there was practically no change, and by March 30 there had been some improvement in the temperature, pulse, and respiration (*vide* chart). The arthritis was much better and no other joints had been affected. There was still spinal rigidity and in addition some stiffness in the arms and shoulders, and distinct temporal and masseter



trismus. Later, the legs became slightly rigid, but to a much less extent.

On April 1 the arms were flaccid, but not paralytic, and the neck and back rigidity was passing off. Commencing post-papillitic atrophy was noted on the same day. Two days later the rigidity of the limbs and the head retraction had disappeared, but the dorsal spine never became quite relaxed. Koernig's sign was no longer obtainable. Slight convulsions set in, at the conclusion of one of which the child died on April 4, without any further change of note having occurred.

Post-mortem examination was made by Dr. J. P. Candler, twenty-four hours after death. The body was distinctly emaciated, and showed one petechial spot of mulberry colour over the front of the right tibia.

Head.—On removing the calvarium the superficial meningeal vessels were found to be swollen and filled with dark fluid blood. The convolutions were flattened. There was no exudate on the cortex. On cutting through the tentorium cerebelli a large quantity of slightly turbid fluid was seen welling up from the spinal canal. The brain on removal was soft and swollen, and the under-surface of the cerebellum and pons was covered with fibrino-purulent exudate, of greenish colour, which spread up for a short distance along the Sylvian fissure on both sides. The lateral ventricles were much dilated and filled with slightly turbid fluid, and in each posterior horn there was a small quantity of greenish coloured pus of gelatinous consistency.

Spinal Cord. — The dura mater was distended and on section of the nerve roots a considerable quantity of turbid fluid escaped from the various openings made in the sheath. This fluid was similar in nature and consistency to that which welled up into the skull when the tentorium cerebelli was divided. The pia mater on the surface of the cord was firmly covered with a thick layer of fibrino-purulent material, and a similar material was found among and surrounded by the strands of the cauda equina.

The left membrana tympani showed a small perforation of old standing. The internal and middle ear contained a few beads of clear fluid. There was no evidence of pus or of necrosis of bone. The lungs showed hypostatic congestion of the bases, and the kidneys were congested, but the other organs showed no evidence of disease.

Remarks by Dr. Beddard.—One or two points in this case deserve a word of comment. The initial collapse was considerable and was due presumably to the diarrhœa and vomiting; but whether these were an early symptom of the cerebrospinal infection, or were due to accidental causes, it is impossible to say. Clincally, the collapse preceded all nervous symptoms by a good many hours. Another point of clinical interest was the extreme suddenness with which the nervous symptoms began, and further, the fact that the early nervous symptoms were entirely cerebral, and not spinal or cerebrospinal. These symptoms began so suddenly and were so purely cerebral that they were considered to be due either to the onset of a virulent septic meningitis, or possibly to the bursting of a cerebral abscess into the meninges. Two other clinical points in the course of the illness may be alluded to,

because of their diagnostic importance—namely, the joint affection and the purpura. The joint affection is a synovitis due to septicæmic joint infection. The conditions in this case were rather like those to be seen in some cases of gonorrhœal arthritis, for there was a good deal of effusion into the tissues round the joint as well as into the actual joint itself. But a more striking feature was the short length of time over which the swelling of the joints was obvious. The swelling was very noticeable for about two days, then rapidly decreased, and at the time of death had practically disappeared. The same is true of the purpura: it was perfectly definite but very slight in extent and might easily have escaped observation. One point in the *post-mortem* appearances deserves attention, *i.e.*, the character of the cerebrospinal effusion. The spinal cord in this case looked as if it were enclosed in a firm greenish-yellow jelly. This peculiar effusion is also seen in posterior basal meningitis and in no other condition. Many observers believe that posterior basal meningitis is a mild endemic form of acute cerebrospinal meningitis; the micro-organisms associated with the two conditions are indistinguishable, and we have the further point that in both conditions we find the same peculiar effusion. Anyone who saw the effusion in the theca would easily understand that in such a case it may be difficult to draw off through a needle any fluid by lumbar puncture.

Cases from the Skin Department.

By G. Norman Meachen, M.D., B.S., M.R.C.P.

Case 1. *Acne Indurata in an Infant.*—A male child, aged 18 months, was brought to the Skin Department with a peculiar eruption upon the trunk which the mother stated had been present for two months. There were seven other children in the family, none of whom had ever suffered from any skin troubles.

On examination, nearly the whole of the front of the chest was covered by a papular and pustular eruption of a dark red colour. Many of the papules and pustules had coalesced to form shallow, superficial abscesses, while here and there could be seen several comedones. The condition did not extend below the level of the sixth costal cartilages. The skin over the back presented a very similar picture, only that the pustules were here fewer in number, probably because there was here less opportunity for scratching the parts and, therefore, of infecting the lesions. The rash stopped at about the level of the angles of the scapulæ. The eruption resembled most, perhaps, an aggravated form of acne rosacea as seen in an

adult. Careful enquiry from the mother elicited the fact that she had been giving the child "soothing powders," but no other kind of medicine.

The treatment consisted in careful evacution of the larger pustules with the acne lancet, dipped in pure carbolic acid, and in the local application of an ointment containing 10 minims acid. carbol. liq., ung. sulph. co. 1 oz., and ung. zinci ½ oz., together with bathing with dilute creolin lotion. Only a very few of the pustules were touched at each sitting, in order to guard against any possible absorption of carbolic acid. After three weeks of this treatment a considerable degree of improvement was manifest.

CASE 2. *Comedones of the Forehead and Kerion of the Scalp.*—The patient was a boy, aged 7. The spots on the forehead were of a month's duration. In this region were a number of typical grouped comedones or "blackheads." The mother declared that she had not been applying anything to the forehead previous to the appearance of the eruption. On the left side of the scalp was also seen a small patch of kerion, or inflammatory ringworm, upon which several of the typical short stumps, characteristic of the disease, could be detected. This had been observed for about two months.

This boy was given the compound sulphur ointment for the forehead and the compound carbolic and salicylic acid ointment for inunction into the scalp.

These two cases are of interest as illustrating the following points: (1) The rarity of any form of acne in young children. Acne vulgaris is essentially a disease of puberty, while acne rosacea is specially seen in women between thirty and forty who suffer from dyspepsia and allied disorders. The indurated variety not infrequently results from the administration of the salts of bromine, though the typical "bromide-rash" is by no means invariably acneiform in character. Cases have been met with in which a bromide eruption has appeared in an infant at the breast, the mother herself taking bromide. It is possible that in the first case the rash may have been induced by the use of the "soothing powders." Other forms of acne, especially those in which comedones are a prominent feature, may be produced artificially, as by the application of tar or tar-products. Some authorities, indeed, still hold that blackheads in young children are always caused in this manner. In the second case no history of any application whatsoever could be obtained. Irritation of the pilo-sebaceous follicles may be produced in many different ways, a seborrhœic tendency being, in many cases, quite sufficient to determine the inflammatory reaction. The discovery of the *Bacillus acnes* by Gilchrist lends strong support to

the view that the whole acne manifestation is microbic, and therefore of infectious origin.

(2) The coexistence of two separate cutaneous diseases in one patient. This is a fact of which little mention is made in dermatological text-books, but, nevertheless, is of considerable importance. As the skin is one of the organs of the body it is quite as likely to be affected with more than one disease at the same time, as are the liver or the lungs. I have divided such association of cutaneous disorders into (*a*) those which are causally related, and (*b*) those which possess merely an accidental relation.[1] In the first group may be placed such diseases as acne vulgaris, seborrhœa of the body and alopecia of the scalp—three apparently distinct affections, all of which may often be seen together in the same patient. The underlying basis of seborrhœa is the connecting link between them. In the second group Case 2 may be placed, ringworm having no pathological relationship to comedones.

(3) The promptitude with which children in general react to treatment. Diseases of the skin form no exception to this general rule. No small vigilance must be exercised in the treatment of affections of the child's skin, for it is very easy to set up inflammatory reaction when this is particularly to be avoided, and the infant is notoriously prone to absorb drugs, even through the unbroken skin.

Case 3. *Molluscum Contagiosum limited to the Scalp.*—A boy, aged 4, was brought by his mother for "warts on the head." These had been present for about four months, and they had been coming out in crops. There were six other children in the family, none of whom were similarly affected.

On examination, the scalp was seen to be covered, here and there, with numerous sessile warty-looking growths, varying in size from that of a large pin's head to that of a small pea. Superficially they certainly bore a strong resemblance to ordinary warts, but on closer inspection they were seen to be umbilicated and their bases were broad. The face and other parts of the body were quite free. On incising the central portion of one of the growths a soft, cheesy-looking substance could be pressed out. This, examined under the microscope in a drop of liquor potassæ, showed the typical "molluscum bodies."

Each individual growth was treated in this way, the cavity being touched with a pointed wooden match dipped in acid nitrate of mercury lotion. A few fresh ones appeared from time to time, but these being vigorously attacked the condition gradually cleared up.

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[1] *Med. Times and Hosp. Gaz.*, April 25, 1903.

This peculiar affection is frequently mistaken for simple verrucæ, if upon the scalp, and upon the face or trunk it may simulate varicella or even variola, especially when the lesions are very numerous. The case recorded here is almost unique, as it is extremely rare to meet with the condition limited to the scalp. They cannot well be confounded with any other cutaneous disorder if only the centre of the "wart" be incised, the contents squeezed out and examined microscopically. The molluscum bodies or corpuscles are oval in shape and of hyaline tranparency. The doctrine of their parasitic character can hardly now be accepted, though the disease is feebly contagious. Modern investigations show that the molluscum bodies are really epithelial cells which have undergone a peculiar degeneration.

I am indebted to Dr. P. S. Abraham for kind permission to publish these cases.

Reviews and Notices of Books.

BOARDMAN REED ON DISEASES OF THE STOMACH AND INTESTINES.[1]

IN no branch of medicine or surgery has there been a greater advance than in the diagnosis and treatment of diseases of the stomach and intestines, and the present work is an attempt to present in a single volume the whole subject of these diseases from the standpoint of our present knowledge, and to give a complete clinical guide to their diagnosis and treatment. The subject is a large one, as is evidenced by the size of the book, but it has been grasped in a thoroughly practical manner, and no one, be he specialist or general practitioner can peruse this volume without gaining a very considerable amount of knowledge thereby. The matter is dealt with in a series of lectures, in each of which the subject treated is most exhaustively discussed and well illustrated.

Part 1 of the volume consists of lectures on the anatomy of the digestive tract; the nerve supply and relations of the spine to the vaso-motor nerves; and the physiology of digestion, absorption and defæcation.

Part 2 describes the various methods of examination, including the physical examination of the patient, the examination of the secretory functions of the stomach, with the various tests of the contents—both qualitative and quantitative—the examination of the fæces and facts to be deduced therefrom, and a systematic guide to diagnosis.

Part 3 is made up of methods of treatment comprising general

[1] "Lectures on Diseases of the Stomach and Intestines." By Boardman Reed, M.D. Pp. 1021. Illustrations 112. Bristol: John Wright and Co. 1905.

considerations concerning diet and dieto-therapy, special diets for various ailments, exercises, the various forms of electricity and vibratory treatment, intragastric methods of treatment, such as lavage and spray, medicinal therapy, drugs and water.

Part 4 is entitled "The Gastro-Intestinal Clinic," and it is in this division that the whole of the diseases of the stomach and intestines are dealt with, including some well-written chapters on gastric and intestinal neurosis, which are well worth reading, a description of the bacteria and animal parasites of the gastro-intestinal tract, and a short description of the surgery of the stomach and intestines. We have given a short enumeration of the contents of this book as the subject matter is so great that it is difficult in the space at command to give an exhaustive criticism of the contents. Suffice it to say that in our opinion it represents the latest teaching both in the pathology and more especially in the diagnosis and treatment of those diseases, and is certain to be widely read. In no work in the English language that we know of, can there be found such an exhaustive and complete discussion of the important subject of dietary, and the whole question of treatment is brought up-to-date, as is evidenced by the chapters on stomach lavage and those on the various forms of electrical massage.

MOORHEAD ON SURFACE ANATOMY.[1]

THE number of small works upon surface anatomy has largely increased of late. The comparisons, therefore, between them and criticisms upon them have naturally become very acute. This latest production cannot be said to be the best. It is primitive, distinctly inaccurate in places, and lacking in those characteristics which go to prove that it is from the pen of a practical man. A few indications will tend to support this view. It is not usual, as stated on page 3, because it is not accurate, to say that the temporal ridges commence in front at the anterior root of the zygoma, nor to affirm that they terminate at the base of the mastoid process. Many of the figures are crude and misleading, and particularly so are figs. 6 and 10. Some of the photographic reproductions, many of which in themselves are good, are marred by the want of care in delineating their several points. For instance, in fig. 21, the line indicating the adductor magnus terminates on the elevation caused by the inner hamstrings, instead of being carried to the actual prominence of the adductor. What place this little work will really fill, it is difficult to see, and it would have been better that its author should have occupied more time in confirming his observations.

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[1] "Surface Anatomy." By T. G. Moorhead, M.D., M.R.C.P.I., Physician Royal City of Dublin Hospital, &c. Pp. 150. Illustrations 23, coloured and plain. Price 4s. 6d. London: Baillière, Tindall and Cox.

TURNER ON APPENDICITIS, INGUINAL HERNIA, AND PERFORATING GASTRIC ULCER.[1]

ANY book embodying clinical lectures must be of value, as such lectures are the record of actual work and the experience gained therefrom. This volume deals with three topics, appendicitis, inguinal hernia, and perforating gastric ulcer, all three of the greatest surgical interest. In discussing appendix operations, the author gives some very practical instructions, a few of which may be quoted as being evidence of the value of the book. In the case of an inflamed and adherent appendix, Mr. Turner suggests dealing with the cæcal end at the outset, and states that this may greatly facilitate removal. Concerning the removal of gauze employed for drainage, he is insistent that it should not be touched for at least forty-eight hours, and then only the superficial portions removed, the rest being gradually withdrawn day by day, until by the fifth or sixth day the terminal parts are released. There can be no doubt that this is very wise advice, and should be carefully followed by all those whose experience of dressing cases of appendix abscess after incision is but slight. The writer is of opinion that purgation is of great service in the paresis induced by peritonitis.

In reviewing the operative treatment of inguinal hernia, Mr. Turner shows himself to be of the moderate school, namely, the surgeon who does not think that because a patient has an inguinal hernia that therefore he or she must submit to an operation. He, however, brings out the fact that in the labouring classes the risk of strangulation is so very real that unless there is really any marked indication to the contrary, a radical operation should be undertaken. He believes in the use of kangaroo tail tendon for buried sutures. He is strongly in favour of opening the inguinal canal freely, and with this most modern surgeons will agree. Turning to the question of gastric ulcer, Mr. Turner states that it is constantly accompanied by vomiting of blood. If this statement is intended to convey the meaning that all cases of ulcer of the stomach are associated with hæmorrhage it is not correct, and is likely to mislead. His expression, "healthy purulent matter," is not perhaps a very happy one, for no purulent matter can be considered as "healthy." His directions for draining the peritoneal cavity in cases of perforating gastric ulcer are clear and sound. Altogether this chapter on gastric ulcer is full of interest. Any surgeon or general practitioner will find much of distinct value in these pages.

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[1] "Clinical Lectures on Appendicitis, Radical Cure of Inguinal Hernia, and Perforating Gastric Ulcer." By G. R. Turner, F.R.C.S., Surgeon to St. George's Hospital. Pp. 136. Price 5s. net. London: Baillière, Tindall and Cox. 1905.

GRIMSDALE ON OPHTHALMIC OPERATIONS.[1]

THE absence of any monograph dealing with the operations belonging to ophthalmic surgery has been rather a noticeable feature of ophthalmic literature. The present work is intended, however, to fill the *hiatus* so far as the chief operations are concerned. Thus, no doubt it will be found useful as a guide to students and others while performing the operations upon the dead body, or upon the eyes removed for that purpose from dead animals. Besides the descriptive details of the various operative procedures, the author has added brief accounts of the clinical signs of certain of the diseases for which operative interference is demanded, as well as the after-treatment of the operations.

WOODRUFF ON THE EFFECTS OF TROPICAL LIGHT.[2]

THIS book was suggested by a paper read before the Anthropological Society of Munich in 1895, the object of which was to show that skin pigmentation of man was evolved for the purpose of excluding the dangerous actinic or short rays of light which destroy protoplasm. This subject was one which had not till then attracted much attention from scientific observers, hence it was that the author set himself the task of instituting a systematic search into all the data bearing thereon. The book before us is the outcome of all his painstaking investigations. It contains a mass of interesting facts, many of which have a practical importance, especially those which refer to the rules for the guidance of white men living in the Tropics. The author denies that acclimatisation for the white man in tropical countries is impossible. Again, he affirms that writers who claim that a tropical climate *per se* is harmless to white men, enabling them to live there for an indefinite period and enjoy good health, are wholly mistaken. Furthermore, he enjoins that it is to the advantage of a white man going to the Tropics that he be of poor muscular development. "A fine musculature in a white man is both pernicious and useless if he goes to a hot climate, for it is a parasite absorbing nutriment, while it requires care, grooming, and time to keep it in health, to do all which it is necessary for the owner to expose himself unduly to the light." The limits of space, however, prevent us from entering more fully into the chief points in this interesting volume; it possesses an interest for all by reason of the many important details bearing upon a hitherto but little known subject; we can, therefore, unhesitatingly recommend its persusal.

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[1] "The Chief Operations of Ophthalmic Surgery: A Practical Guide for Students." By Harold B. Grimsdale, M.B., B.C., F.R.C.S. London: The *Medical Times*, Ltd. 1904.

[2] "The Effects of Tropical Light on White Men." By Major Chas. E. Woodruff, A.M., M.D., U.S.A. London and New York: Rebman Ltd. 1905.

HARMAN ON THE CONJUNCTIVA IN HEALTH AND DISEASE.[1]

THIS monograph is chiefly based upon the results of a large amount of painstaking work undertaken by the author. Among other investigations he conducted an enquiry into the bacteriology of the normal conjunctival sac, and for this purpose he examined the conjunctivæ of 100 school children, 50 of whom were dirty and 50 clean. Of these children the conjunctiva was found sterile in twenty-three instances, of which three instances only belonged to the dirty children. This sterility was an interesting discovery; but is, doubtless, of less practical importance than if the enquiry had related to persons of adult age. It would be of more value to learn if sterility were ever present in the conjunctival sac of persons, say after the age of 40, when intraocular operations begin to be required. Perhaps the lachrymal secretion has more effect as a germicide in the young than in the adult, and this may have had something to do with the bacteriological result which the author obtained. In the well-written description of phlyctenular conjunctivitis the author discusses (*a*) the excessive lachrymation, and (*b*) the blepharospasm, commonly associated with the disease. He attributes the latter to the "result of a direct reflex between the closely associated sensory nerves of the conjunctiva and the motor nerves of the orbicularis, *i.e.*, between the fifth and the seventh nerves." In our opinion acute blepharospasm is only met with when the cornea is involved: in such cases careful examination will always reveal a small superficial ulcer of the cornea, which by reason of its superficial character is acutely painful. Blepharospasm is, therefore, a complication and not a symptom of phlyctenular conjunctivitis, inasmuch as, so long as the herpetic eruption is confined to the conjunctiva no blepharospasm occurs. The author in his description of pterygium makes no mention of its supposed bacterial origin. This being a debated point, it would have been interesting had he included it among his bacteriological investigations. An exhaustive bibliography concludes the volume. As a practical guide to the study and treatment of diseases of the conjunctiva we can cordially recommend this work.

LAMMONIER ON NEW METHODS OF TREATMENT.[2]

THE aim of this work is to furnish the medical profession with definite and concise information concerning the new drugs and methods of treatment whose worth has been established and which are sufficiently well known to be described in a practical manner.

At a time when the profession is flooded with literature and samples of new drugs and preparations, it is extremely difficult for the busy

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[1] "The Conjunctiva in Health and Disease; being a Record to Some Research Work." By N. Bishop Harman, M.A., M.B.Cantab., F.R.C.S. London: Baillière, Tindall and Cox. 1905.

[2] "New Methods of Treatment." By Dr. Lammonier. Translated and Edited by H. W. Syers, M.A., M.D.Cantab. Pp. 316. Price 2s. 6d. London: Archibald Constable and Co., Ltd. 1904.

practitioner to acquire any practical knowledge of many of these preparations, and to separate the wheat from the chaff, and we consider this work will be a valuable aid in enabling him to do this; as although it must contain an account of many methods which will, in the course of time, be replaced or superseded, yet it explains a large number of modes of treatment which will undoubtedly prove of value. We would recommend its perusal by every practising member of the medical profession.

LAKE ON LARYNGEAL PHTHISIS.[1]

THIS book represents the record of results obtained by the observation and treatment of over 650 cases of tuberculous laryngitis. The importance of this subject and the great value of its treatment should render this work acceptable to the profession, founded as it is on the experience of so much clinical material. The book is clear and concise in its directions, the illustrations (many of them coloured) are admirable, and a useful list of formulæ is given as an appendix.

STUART-LOW ON MUCOUS MEMBRANES.[2]

THE object of this small treatise is to draw special attention to the mucous membranes of the body, and to the important part that mucin plays in the animal economy.

The author points out that mucous glands are widely spread throughout the human system, and how necessary they are to the various processes of respiration, deglutition and digestion. He then enumerates the special functions of mucin, describing the various diseases which arise from quantitative and qualitative changes in its secretion. He also points out that three-fourths of all cancer in man occurs in the alimentary canal, and that a large proportion of the whole is located in the mouth, gullet, throat and larynx, and endeavours to prove that a number of these cases arise from a deficiency in the supply of mucin. The theory is ingeniously worked out, and the book is worth reading on this account alone.

SIMPSON ON THE MAINTENANCE OF HEALTH IN THE TROPICS.[3]

THIS handbook on the maintenance of health in the Tropics is published under the auspices of the London School of Tropical Medicine, as it was felt that a small manual dealing with hygiene in

[1] "Laryngeal Phthisis." By Richard Lake, F.R.C.S. Second Edition by Harold Barwell, M.B.Lond., F.R.C.S. Pp. 120. 45 Illustrations. Price 6s. 6d. London: Baillière, Tindall and Cox. 1905.

[2] "Mucous Membranes, Normal and Abnormal, including Mucin and Malignancy." By William Stuart-Low, F.R.C.S. Pp. 55. Price 2s. 6d. London: Baillière, Tindall and Cox. 1905.

[3] "The Maintenance of Health in the Tropics." By W. J. Simpson, M.D., F.R.C.P. Pp. 118. Price 2s. 6d. Illustrated. London: John Bale, Sons and Danielsson, Ltd. 1905.

a simple manner was needed and would prove useful to the general public. We recommend this manual cordially, as it is simply and clearly written, and if its directions are followed many of the ills and risks of hot climates should be avoided. We have seldom met with a book which comprises just the information required so simply stated and in such a small compass.

VALLACK ON ASEPSIS.[1]

This is a useful little book on the principles and practice of asepsis, written in a clear and readable form, more especially for the general practitioner. We have read the book with pleasure, and no busy medical man who follows the directions laid down can fail to derive considerable benefit and success therefrom. The author lays considerable stress on the impossibility of rendering the hands sterile by any known method, and therefore insists on the necessity of wearing sterilised rubber gloves in all operative work.

LEAF'S CHARTS FOR RECTAL DISEASES.[2]

These charts consist of three outline drawings of the perineum, an antero-posterior and a transverse vertical section through the pelvis. They are perforated so as to be easily detachable, and gummed on the back, thus rendering them easy of insertion in the case-book. They should prove useful to those who wish to keep careful notes of the position and condition of the pelvic contents.

ALAN FIELD ON WEST AFRICA, NIGERIA, AND THE COASTS.[3]

THIS little book should prove most useful to those intending to go to West Africa, and should supply a long-felt want, as it contains just the knowledge and experience which is so necessary to travellers going to a fresh country for the first time, and which is usually so hardly won. It is full of information from the first to the last page, and it is not easy to think of a question or a difficulty which may arise which is not fully dealt with. We should therefore earnestly advise every traveller to these lands to expend the small sum of two shillings and sixpence in acquiring the information contained in this volume, which will assuredly be the means of saving much time, trouble and expenditure, and it is quite possible even his life.

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[1] "The Principles and Practice of Asepsis." By Arthur S. Vallack, M.B., Ch.M. Sydney, L.M. Rotunda. Pp. 105. Price 2s. 6d. London: Baillière, Tindall and Cox. 1905.

[2] "Surgical Case-Book Charts for Rectal Diseases." By Cecil H. Leaf, M.A., M.B. Cantab., F.R.C.S. Eng. Price 1s. 6d. London: Archibald Constable and Co., Ltd. 1905.

[3] "'Verb. Sap.' on Going to West Africa, Nigeria, and the Coasts." By Alan Field, F.R.G.S. Pp. 154. Price 2s. 6d. London: John Bale, Sons and Danielsson, Ltd. 1905.

THE BRITISH SANATORIA ANNUAL.[1]

THIS work is divided into two sections, one giving a description of private sanatoria, and the other sanatoria that are free, or at which reduced fees are taken. It comprises a list of all the known sanatoria, with full information as to accommodation, position, fees and advantages of each, and it is well illustrated, so that it should prove a useful work of reference for any one wishing to choose a Sanatorium for a patient.

FRONSSARD ON MUCO-MEMBRANOUS ENTERO-COLITIS.[2]

A SMALL monograph dealing with the subject of muco-membranous colitis in all its clinical forms, differentiating it from the various other intestinal disorders of infective origin, and showing how it is generally secondary to irritation from intestinal nerve centres.

TIMBRELL BULSTRODE ON THE PREVENTION OF DISEASE.[3]

WE can heartily recommend a careful perusal of this work. It will repay any practitioner of medicine to do so. Medical men are constantly asked by patients, by public bodies, and others, to give an opinion as to the risks to health which are supposed to arise under certain conditions. Only last week we were asked what risk of conveying small-pox was incurred when a lady had visited the home of a nurse who had returned from waiting on a small-pox patient. The responsibility attaching to such decision is great, and we found relief by turning to the pages of the above-named volume. But the strength of this work does not entirely lie in its account of prophylaxis against infectious diseases only. Diseases of the nervous system, of the urinary organs, of the skin, and indeed of every anatomical system of the body, are discussed fully from the view of preventive medicine. Whilst such careful and exhaustive studies of this subject are published, our profession may well be proud of the altruism which distinguishes modern practice.

We would carefully recommend a careful study by every practitioner of the chapters on Prevention of Diseases of Children, and Prophylaxis in Midwifery. In view of the great, though happily decreasing, mortality in childhood and during childbirth, a careful observance of the rules and methods which are so clearly described in these chapters will repay the student, not only in enhanced reputation as a practitioner, but in a decreased number of distressing cases.

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[1] "The British Sanatoria Annual." Pp. 124. 80 Illustrations. Price 5s. London: John Bale, Sons and Danielsson, Ltd.

[2] "Muco-membranous Enterocolitis." By Paul Fronssard, M.D. Edited by Dr. Edward Blake. Pp. 66. Price 2s. 6d. London: Henry J. Glaisher. 1905.

[3] "The Prevention of Disease." Translated from the German by Timbrell Bulstrode, M.D. London: Archibald Constable and Co. 1905.

The chapter on Prevention of Diseases of the Heart is also a most instructive one. It teaches us not to rely entirely on drugs. It teaches us the advantage of careful bodily rest, and the alleviation of mental strain; and, what is very important, it emphasises the importance to the patient, of his medical adviser being most guarded in the way he speaks of "heart lesion," "fatty heart," &c. Our experience fully corroborates this. In many instances the fear of some small irregularity of the heart has a more detrimental influence on some patients' health than actual valve disease has on another's.

An admirable index renders reference to any given point quite an easy matter; and we can only repeat that the work is one which we all should study.

SAVILL ON CLINICAL MEDICINE.[1]

WE had occasion to review favourably the first volume of this system, and we can now only congratulate the author on the painstaking and thoroughness which he has expended upon the second and concluding volume of his work. The predominant—clinical—feature is well maintained throughout, but it is especially noticeable that out of 444 pages, of which the work consists, no fewer than 301 are devoted to two subjects, namely, 65 to diseases of the skin, and 236 to the nervous system, respectively. The author, however, has acquitted himself well in both of these subjects; the former will serve as a handy, practical guide for those in search of hints upon the treatment of disorders of the skin, while in the chapter upon the nervous system the author presents us with a well-written and valuable digest of the symptoms and treatment of its diseases, which will amply repay every practitioner to peruse; the concluding chapter of the work deals in a practical manner with clinical bacteriology and the examination of pathological fluids.

THE LIBRARY REPORT.

SINCE the publication of the last Report there has been another exhibition of recent works at a meeting of the Society, and it met with evident appreciation from many members who were present. The chief works were those on surgery and its special branches.

It is intended next Session to continue these exhibitions from time to time. It is satisfactory to note that the missing copies of the Society's Journal have been supplied by a member in response to the notice last March. At the suggestion of the Librarian the Council have sanctioned the

[1] "A System of Clinical Medicine, dealing with the Diagnosis, Prognosis, and Treatment of Disease." For Students and Practitioners. By Thomas D. Savill, M.D.Lond. Vol. II. "Certain General Disorders: Diseases of the Skin and the Nervous System." London: J. and A. Churchill. 1905.

destruction or disposal of many useless and torn volumes that formerly encumbered the limited shelf accommodation of the Library.

HERBERT W. CHAMBERS.
May, 1905. *Hon. Librarian.*

SUPPLEMENTARY LIST OF MEMBERS SUBSCRIBING TO LIBRARY:—

Dr. Davidson. Dr. Fry. Dr. Peake.
Dr. Tomlinson.

BOOKS RECEIVED.

Lectures on Diseases of the Stomach and Intestines. By Boardman Reed, M.D.

Surface Anatomy. By T. S. Moorhead, M.D., M.R.C.P.

Clinical Lectures on Appendicitis, Radical Cure of Inguinal Hernia, and Perforating Gastric Ulcer. By G. R. Turner, F.R.C.S.

New Methods of Treatment. By Dr. Lammonier. Translated and edited by H. W. Syers, M.A., M.D.Cantab.

Laryngeal Phthisis. By Richard Lake, F.R.C.S.

Mucous Membranes Normal and Abnormal, including Mucin and Malignancy. By Wm. Stuart-Low, F.R.C.S.

The Maintenance of Health in the Tropics. By W. J. Simpson, M.D., F.R.C.P.

The Principles and Practice of Asepsis. By Arthur S. Vallack, M.B., Ch.M.Sydney.

Surgical Case-Book Charts for Rectal Diseases. By Cecil H. Leaf, M.A., M.B.Cantab, F.R.C.S.Eng.

"Verb Sap" on Going to West Africa, Nigeria and the Coasts. By Alan Field, F.R.G.S.

The Historical Relations of Medicine and Surgery. By T. Clifford Allbutt, M.A., M.D.

Dental Surgery. By A. W. Barrett, M.B.Lond., M.R.C.S., L.D.S.

The Diagnosis and Treatment of some of the Common Diseases of the Rectum and Anus. By Cecil H. Leaf, M.A., M.B.Cantab., F.R.C.S.Eng.

Muco-membranous Enterocolitis. By Paul Fronssard, M.D. Edited by Edward Blake.

The Prevention of Disease. Translated from the German by Timbrell Bulstrode, M.D.

The Chief Operations of Ophthalmic Surgery. By Harold B. Grimsdale, M.B., B.C., F.R.C.S.

The Effects of Tropical Light on White Men. By Major Chas. E. Woodruff, A.M., M.D., U.S.A.

The Conjunctiva in Health and Disease. By W. Bishop Harman, M.A., M.B.Cantab., F.R.C.S.Eng.

The British Sanatoria Annual. London: John Bale, Son and Danielsson, Ltd.

PROPOSED AMALGAMATION OF MEDICAL SOCIETIES.

At least two previous attempts for the amalgamation of the Medical Societies in London have proved abortive. There is now a third scheme under serious consideration by an influential Committee, and it is to be hoped that real good may come of their deliberations.

The subject of the fusion of medical societies is a large and difficult one, which may be looked at from two points of view—one broad and general, the other narrow and local. Perhaps the conception of a Royal British Academy of Medicine is the ideal. This should confederate every medical society in Great Britain, and even those societies of a professional nature which include certain laymen as well as medical practitioners, such, for instance, as the Medico-Legal Society. Many of the societies thus confederated in the Academy should not lose their identity or individuality. The West London Medico-Chirurgical Society would still fully maintain its local existence, while receiving prestige from union with the central body. A true amalgamation would take place certainly so far as the two medical societies owning appreciable property, viz., the Medical Society of London and the Royal Medical and Chirurgical Society.

It would be a most propitious year, the centenary year of the Royal Medical and Chirurgical Society, for this amalgamation to come about.

The narrower view of the subject is that in which these two societies should amalgamate together, and with several other well-known central societies, and that this fusion should be given some well-sounding name.

In this case such a society as the West London Medico-Chirurgical Society would take no part in the amalgamation, and would pursue its triumphant—the word is surely not too strong—course alone. This scheme lacks the masterly view of the larger, which wider union is in the minds of many.

The thoroughly representative Committee appointed, by delegates from some thirty-seven medical societies, is now busily engaged in formulating a scheme to be presented to the delegates in July, and if approved by them, to the whole of the societies concerned immediately afterwards.

THE WEST LONDON HOSPITAL AND POST-GRADUATE COLLEGE.

Annual Dinner.

It is our pleasure to record the very great success of the West London Hospital and Post-Graduate College Annual Dinner, which took place on Wednesday, June 7, in the Alexandra Room, Trocadero Restaurant, with Dr. Seymour Taylor in the Chair. The Hon. Secretary and the Dinner Committee must have worked very hard, as about 140 sat down to dinner. A good programme of music was given by Mr. Algernon Clarke's string quartette, and with a well-served dinner and really good speeches all went off as successfully as could be wished.

The Royal toasts having been given by the Chairman, Mr. C. B. Keetley gave the toast of "The Imperial Forces" in his usual humorous style, the Director-General of the Navy responding for the Navy, in a speech in which he emphasised the great value of the Post-Graduate College, and promised to do all in his power to advise naval medical officers to attend the classes. "The Army" was responded to by the Director-General of the Army, who made a point of the lack of organisation of the Volunteer Medical Service.

The toast of "The West London Hospital and the Post-Graduate College" was given by the Chairman, and responded to by Mr. S. F. Marshall, a Governor of the Hospital and member of the House Committee, and by Mr. L. A. Bidwell, the Dean of the College.

Mr. Marshall, in an able speech, alluded to the interest which the Governors of the Hospital took in the Post-Graduate College, and emphasised the value of the work done by the post-graduates in the out-patient rooms and casualty department of the Hospital, and on behalf of the House Committee promised to do all that was possible to ensure the continued success of the College.

Mr. Bidwell gave a short description of the origin of the College, alluding to the fact that at the first series of lectures only one post-graduate put down his name for attendance, so that the members of the Staff were reduced to attending each others' lectures; now the lists were filled to overflowing, and the courses of special study had been a very great success.

The toast of "The Visitors" was given by Mr. Swinford Edwards, and responded to by Sir Richard Douglas Powell, Bart.

Dr. Leonard Dobson gave the toast of "The Chairman," which was received with musical honours; and a sympathetic

speech by Dr. Taylor in reply brought a very pleasant evening to a close. Appended is a list of those present:—

Abraham, Dr.
Alderton, T. G., Esq.
Augustine, H. J., Esq.
Archer, Lt.-Col.
Armour, D., Esq.
Arthur, D., Esq.
Ball, Dr.
Baldwin, A., Esq.
Barnes, Fleet-Surgeon.
Bean, A. C., R.N.
Beaumont, N. C., Esq.
Betteridge, A., Esq.
Bidwell, L. A., Esq.
Bird, R., Esq.
Bowe, F., Esq.
Brooks, J. H., Esq.
Browne, H. F., Esq.
Brown, Burton, Esq.
Brown, W. H., Esq.
Chambers, H., Esq.
Clayton, Staff-Surgeon.
Clippingdale, Dr.
Clutterbuck, Col.
Copeman, Dr.
Coulson, Dr.
Craig, Dr.
Dobson, Dr. L.
Dunn, H. P., Esq.
Eccles, McAdam, Esq.
Edwards, F. S., Esq.
Elliot, Dr.
Erskine, J., Esq.
Fielding, F. J., Esq.
Fink, Major.
Gilbert, R. J., Esq.
Gray, A. G., Esq.
Grunbaum, Dr.
Hancock, Dr.
Harwood, Lt.-Col.
Herdocia, Dr.
Hickson, Col.
James, Dr. Culver.
Jameson, Major.
Jones, Dr. R.
Keetley, C. B., Esq.
Keys, Dr.
Krakowsky, Dr.
Last, C., Esq.
Ligertwood, Dr.
Lloyd, R., Esq.
Longinotto, Dr.
Lougheed, Col.
Low, F. H., Esq.
Lyon, Dr. A. B.
Macdougall, D., Esq.
Masters, Dr. Hooper.
Meachan, Dr. N.
Mennell, Dr. Z.
Muir, J. C., Esq.
Nery, Dr. C.
Norbury, Dr.
O'Keeffe, Col.
Paget, S., Esq.
Patterson, Dr. Kelley.
Pardoe, J., Esq.
Pickthorn, Fleet-Surgeon.
Plews, J. M., Esq.
Rideal, Dr.
Robinson, G. D., Esq.
Russell, Dr. E. A.
Saunders, Dr. E. A.
Shuter, Dr. G. P.
Simpson, Garry, Esq.
Smith, Gordon, Esq.
Smith, Johnson, Esq.
Stephenson, Capt.
Taylor, Dr.
Tomlinson, Dr.
Travers, Dr.
Underhill, Fleet-Surgeon.
Ware, Dr.
Watson, R., Esq.
Wharry, H. G., Esq.
Wilkinson, C. W., Esq.
Williams, Chisholm, Esq.
Wiseman, Dr.
Wilson, Col. E. M.
Wraith, Dr.

Official Guests.

Director-General A.M.S.
Director-General R.N.
Editor *British Medical Journal.*
,, *Daily Telegraph.*
,, *Lancet.*
,, *Morning Post.*
,, *Times.*
The President Royal College of Physicians.
Burstal, G., Esq.
Harnett, Dr.
Hart, Dr.
Marshall, G. F., Esq.
Micklethwaite, Dr.
Rawle, H. Grant.
Bean, Capt. W. H., late R.A.M.C.
Ambrose, Dr.
Buxton, —, Esq.
Laurence, —, Esq.
Mackenzie, Dr. Shaw.
Butler, Morris, Esq.

Harris, E. Stuart, Esq.
Rooke, Faulkland, Esq.
Dawson, Wm., M.I.C.E.
Atler, Dr.
Cooper, Dr.
Crook, Dr.
Pegler, Dr.
Perry, Dr.
Harold, Dr.
O'Connor, Dr.
Brookhouse. Dr.
Younger, Dr.
Pinker, H. G., Esq.
Sharpe, Dr. Salisbury.
Box, Dr.
Sargent, —, Esq.
Buttar, Dr.
White, Dr. Finch.
Hillings, Dr. Guy.
Parkington, Sir Roper.
Savill, Dr. T. D.
Copeman, Dr. Monkton, F.R.S.
Waters, Dr.
Stennan, Surgeon-Lt.-Col.
Hampton, Dr. Owen.
Wickenham, Dr. Watson.
Miles, G. H., Esq.
Wilkinson, Col.
Brooks, Dr. D'Oyly.
Underhill, W. H., Esq.
Travers, Harold, Esq.
Smith, Dr. P. Montague.

THE POST-GRADUATE COLLEGE.

By the Dean.

The Summer Session commenced on Monday, May 8. During the past three months sixty-seven post-graduates have attended the College, in addition to sixty-nine life members. Amongst these were seven officers of the Naval Medical Service, two in the Royal Army Medical Corps, and eight in the Indian Medical Service, and twenty-one from the Colonies and abroad.

Special classes have been held in the following subjects: Diseases of the Eye (2), Practical Administration of Anæsthetics (2), Tutorial Class in Medicine (1), Surface Anatomy (1), Gynæcology (1), Examination of the Throat, Nose, and Ear (2), Intestinal Anastomoses (3), Skiagraphy (2), Bacteriology (3), Clinical Examination of Blood and Urine (3), and Operative Surgery (5).

The Annual Conversazione of the College was held on Wednesday, March 29, when about 150 past and present members of the Hospital Staff, residents and post-graduates were present. Exhibition of surgical instruments and of drugs was made by several firms. There was an animatograph display by Robert W. Paul. Dr. David Arthur exhibited X-ray and High Frequency Apparatus, and Dr. Candler showed Pathological and Microscopical Specimens from the Laboratory. A Boxer sword and some Chinese war pictures were lent by Fleet-Surgeon W. G. K. Barnes, R.N., and some Kaffir, Indian and Boer arms were lent by Dr. T. Webster Atkins. A beautiful collection of Austrian and Swiss photographs, shown by Mr. Spinnhirn, were greatly

admired. The guests were entertained by a cinematograph exhibition and by some excellent conjuring tricks of Mr. Bertram. During the evening Mr. Algernon Clarke's orchestra played a varied selection of music.

The following is a list of post-graduates who have attended the practice of the West London Hospital during the last three months. An asterisk is placed against the names of those who are Life Members.

*L. H. Armstrong (Ripon).
*D. Arthur (Ealing).
Capt. E. F. E. Baines, I.M.S.
T. W. Atkins (Shepherd's Bush).
H. J. Augustine (Burmah).
*G. J. Bagram (Bayswater).
*A. Baldock (Earl's Court).
*W. E. Barton (Streatham).
Fleet-Surgeon W. G. K. Barnes, R.N.
*A. Geo. Beale (Kensal Rise).
Surgeon A. C. Bean, R.N.
S. H. Belfrage (London).
Capt. Vivian Bennett, I.M.S.
*Deputy-Insp. R. Bentham, R.N.
F. Bowe (Timaru).
Lt.-Col. A. T. Bown, I.M.S.
R. Briffault (Westport, N.Z.).
*R. D. Brinton (South Kensington).
John Brunt (Hammersmith).
F. C. Bryan (Bayswater).
*H. F. Browne (Langham Street).
*W. M. Burgess (Harlesden).
G. Burton Brown (late R.N.).
J. E. Butler (Boston, U.S.A.).
*M. J. Cadell (Bayswater).
*Capt. Carmody, R.A.M.C. (ret.).
*Major E. R. W. Carroll, I.M.S.
H. W. Chambers (Hon. Member) (Shepherd's Bush).
Staff-Surgeon F. H. A. Clayton, R.N.
*Col. Clutterbuck (Bayswater).
*E. J. Coulson (Fulham).
R. Craig (Caterham).
A. J. Craigen (British New Guinea).
H. Evelyn Crook (Richmond).
H. V. Crossfield (Sydney).
*J. S. Curgenven (Bayswater).
G. G. Davidson (West Kensington).
F. S. Dawe (Chiswick).
*L. Dobson (Kensington).
Major B. H. Deare, I.M.S.
W. Barclay Dick (West Ealing).
Binnie Dunlop (Woodford Green).
C. W. Emlyn (Bayswater).
G. J. Evans (Norwich).
*A. St. Aubyn Farrer (Paddington).
Fred. G. Fielding (S. Antonio, Texas).
Major G. H. Fink, I.M.S.
*W. H. Fitzmaurice (Dunmanway).
*Fleet-Surgeon A. M. French, R.N.
W. E. Fry (Hammersmith).
F. Gans (Austria).
*H. M. Gay (Southampton).
*D. Gault (New Zealand).
V. R. Gorakshakar (India).
*A. J. Grant (West Kensington).
*W. Grantham Hill (Chiswick).
A. G. Gray (Earl's Court).
*C. H. Haines (Kensington).
*C. S. Hancock (Leytonstone).
*W. Allen Harmer (Tonbridge).
H. Wheatley Hart (Homefield, C. Colony).
*A. Harrison (Yeovil).
*N. Heard (Kensington).
E. W. Hedley (Westminster).
R. H. Hemsted (Whitchurch).
C. Herdocia (Nicaragua).
Lt.-Col. S. Hickson, R.A.M.C.
*W. C. James (Kensington).
*Capt. Johnson R.A.M.C.
Elias Keys (Uitenhage).
*Alexander Krakowsky (Paarl, C. Colony).
*R. A. Kirby (Westminster).
*W. B. Kirkaldy (West Kensington).
*T. M. Legge (Temple).
*T. Ligertwood (Chelsea).
Lees, C. A. (West Ealing).
*J. Lynes (Kensington).
*A. Barclay Lyon (Hammersmith).
Alberto Lopez (Nicaragua).
*Norman Macdonald (Harlesden).
*G. Maguire (Kew).
*W. Hooper Masters (Barnes).
*E. D. Macdougall (Walton-on-Thames).
D. Macdougall (Dover).
*J. B. Mackay (Isle of Wight).
*H. McNickle (Vauxhall).
*D. F. Maunsell (South Kensington).
Major G. T. Mould, I.M.S.
J. A. Morgan (Llanwyrtyd).

*B. W, Mudd (Storrington).
J. C. Muir (St. George's Infirmary).
W. Nolan (Bayswater).
*W. Norbury (London).
Lt.-Col. M. W. O'Keeffe, R.A.M.C.
*R. W. Olver (New South Wales).
*H. M. Page (Kensington).
H. Compton Parsons (Willesden).
Staff-Surgeon B. F. Parish, R.N.
W. Harland Peake (Hampstead).
*A. F. Penny (Chelsea).
R. O. Patrie (Bridlington).
*R. D. Pollock (Acton).
Douglas R. Pike (Kensington).
Fleet-Surgeon E. B. Pickthorn, R.N.
E. A. Purcell (Wimbledon).
*A. Renny (Southampton).
*A. H. Rideal (Twickenham).
J. C. A. Rigby (Pretoria).
D. F. Roberts (Old Charlton).
*Patrick Robertson (Canada).
*A. Tait Robinson (Portman Square).
Major W. H. B. Robinson, I.M.S.
*Neil Robson (Edinburgh).
*F. E. Rock (Hammersmith).
*T. Mackay Ross (Fulham).
W. F. Roe (St. Luke's).
J. J. Savage (U.S.A.).
T. Scatchard (Tadcaster).
*Lt.-Col. Silcock, I.M.S.
*G. A. Garry Simpson (Acton).
*A. Ross Sinclair (Parson's Green).
*W. Slater (Epping).
T. C. Spence (Saskatchewan).
*H. H. Sturge (Maida Vale).
*E. Swain (Hampton Hill).
F. C. Tothill (Staines).
Capt. Jno. Stephenson, I.M.S.
W. R. Tomlinson (Moree, N.S.W.).
E. F. Travers (Kensington).
Fleet-Surgeon J. W. Underhill, R.N.
*L. A. Walker (Ladbroke Grove).
*H. W. Walter (Brentford).
Fleet-Surgeon A. C. Wildey, R.N.
*J. Williamson (Putney).
*A. P. Woodforde (Shepherd's Bush).
Oswald S. Wraith (Darwen).

THE ANNUAL CONVERSAZIONE.

THE Annual Conversazione was held on Friday, June 23, at the Town Hall, Hammersmith, preceded by the Cavendish Lecture. The attendance of members and guests invited by the President and Council was a record one. Every inch of space in the main hall and annexes was occupied by the exhibits, and the Committee would have been glad of more space. The hall and lecture theatre were prettily decorated with ferns and flowering plants, and, as usual, Mr. Algernon Clarke's band increased the brightness of the evening by musical selections at intervals. Light refreshments were served during the evening and the meeting passed off most successfully. Hearty thanks and congratulations must be accorded to the Editorial Secretary and Stewards for the smooth working of everything. The following is a full list of the exhibits :—

The "Aliône" (64, Knight's Hill Road, West Norwood, London, S.E.).

This exhibit comprised many novelties in the dressing of infants and invalids. Sets complete of "Aliôné" Baby Clothes No. 1 and 2, for Day, Night, and Out-of-doors—each set all in one, and laid out flat for the reception of the Baby, who can then be dressed in a few minutes without moving him. "Ark of Safety Cot," Model of a wicker one. The Baby can be enclosed and left

with perfect safety and plenty of air—Canopy for older children. Socks that do not slip off; Knitted Coats, &c.; Curl-caps that keep baby's ears down. Lady's Invalid Gown, opens anywhere without uncovering the patient, except in the particular parts desired. Lady's Dressing-Jacket—put on front ways so as to save putting the arms back or moving the patient. Model of Tea-Gown on the same lines—can be spread outside the bed, leaving the patient in her nightgown and bedclothes, giving the appearance of her being dressed —Models of Complete Set put on front ways. Man's Trousers put on one leg at a time; Drawing of Coat and Waistcoat in one, put on front ways; Man's Dressing-gown—can be worn outside the bedclothes.

Messrs. Allen and Hanbury (48, Wigmore Street, W.).

Messrs. Allen and Hanbury had a splendid display of instruments, among which we noticed Eve's Cerebrospinal Manometer for measuring the cerebrospinal fluid. A Uterine Dilator, by R. de Seigneaux. This instrument is constructed in such a manner that each of the blades can be introduced separately, like the branches of a forceps, and fixed to the handle when in position. As soon as dilatation has been set up, the blades can be withdrawn one after the other, thus preventing the danger arising from not being able to withdraw the instrument easily on account of the descent of the head during the operation. Another advantage of this instrument is, that it is less liable to split the cervix on account of the pelvic curve. A Motoring Emergency and Ambulance Case Combined, as supplied to the Great Northern Railway Company, &c. This case has been in use for over two years, and has been found to be the most useful, and at the same time the most compact case obtainable. The "Allenbury's" Midwives' Case. This case has been put forward to comply with the regulations of the Central Midwives' Board. It consists of a steriliser and appliances required for accouchement cases. All necessary articles can easily be sterilised and rendered aseptic. Size, 14½ inches long, 6½ inches broad, 4½ inches deep. De Prenderville's Chloroform Mask. Allen and Hanbury's Patent. This mask possesses several advantages over all other forms. The part of the apparatus resting on the patient's face is made in the form of a gutter, thus preventing any moisture from running on to the face and causing blistering. Another advantage is that the frame is arranged to keep the lint well away from the face, and the whole frame of the mask is built taller. The whole apparatus is collapsible and can be carried in the coat pocket. A New Forceps for Prostatectomy. These are designed for pulling the prostatic gland through the suprapubic opening. They are useful for Thyroid Glands, Tongue Forceps, &c., &c. A New Dissector for Enucleating the Prostatic Glands. Aseptic Syringe. This new syringe is fitted with three pipes, and can be taken entirely to pieces, and thus rendered practically aseptic, and can therefore be used for nearly every purpose for which a syringe is required. Killian's Set of New Nasal Instruments for submucous resection of the septum. They consist of Nasal Plough, Dissector, Forceps, Probes, Raspatory, and two "V"-shaped Gouges. There were many other articles exhibited too numerous to mention, but all characterised by careful workmanship and high-class finish.

Andreas Saxlehner (Budapest). London Agency: Trafalgar Buildings, Charing Cross.

This exhibit was made up of samples of the celebrated Hunyadi Janos Water, which, as is well known, is a natural mineral water of the purgative saline type. The water is drawn from wells situated near Budapest on the right side of the Danube, and the strictest precautions are taken to avoid any contamination from any source whatever. The analysis of Liebig is as follows: Sulphate of Magnesia, 16·01 per 1,000; Sulphate of Soda, 15·91 per 1,000; Sulphate of Potash, 0·08 per 1,000; Chloride of Sodium, 1·30 per

1,000; Carbonate of Soda, 0·79 per 1,000; Carbonate of Zinc, 0·93 per 1,000; Carbonic Acid in Solution, 0·52 per 1,000. The *Lancet* Commission has made an exhaustive examination of the springs of a series of samples of the water taken therefrom, and reported that the water as sold was undoubtedly a natural mineral water of constant composition and free from all organic impurity.

Messrs. Arnold and Sons (West Smithfield, E.C.).

Among the many articles displayed we noted: Drury Thompson's Improved Nasal Inhaler; Victor Bonney's Improved Axis-traction Midwifery Forceps; Dent's Improved Gag; McKay Macdonald's Post Nasal Curette; New Forms of Gland Forceps; Improved Artery Forceps, with Suture attached; Improved Clamp Forceps for Suture of Intestine; Improved Enterotribe; Sim's Speculum, with automatic lever blade; Whiteford's Modified Clover's Inhaler; Improved Forms of Nasal Atomisers; Stretton's Uvula Scissors; A New Adaptable Spray; Still's Plaster Shears; Kocher's Hernia Forceps; Todd's New Perineum Needle; Improved Suture Needles, with spring eye; Downe's Electric Angiotribes; Instrument Cabinets; Sterilisers, and a good selection of Instruments for Eye, Ear, Nose, Throat, and General Surgery.

Messrs. John Bale, Sons and Danielsson, Limited (83-89, Great Titchfield Street, W.).

An examination of the exhibit of this firm shows them to be in the forefront, especially with respect to publications on Tropical Medicine. The Journal itself dealing with this department is an evidence of the increasing interest taken in diseases peculiar to tropical and sub-tropical countries. Some of the illustrations of these subjects are beautifully reproduced, and help to elucidate some remarkable cases—one we would especially mention, which appears in the issue of April 1, illustrating a case of elephantiasis of the scalp in a Swaihili living at Zanzibar. Here were also some advance sheets of what promises to be a most useful volume—a translation of Braun's "Animal Parasites," which has been very carefully translated and also brought up to date by Dr. Sambon and M. F. Theobald. This book is profusely illustrated, and we should think there is likely to be a large demand for it. Col. Giles has added a supplement to his valuable work on "Gnats and Mosquitoes," bringing it abreast of the most recent investigations; Messrs. Bale have also brought out a volume by the same author, entitled, "Climate and Health in Hot Countries and the Outlines of Tropical Climatology." This work is published either in one or two volumes, the second part, "Outlines of Tropical Climatology," appealing more directly to the medical profession. We believe this work will be of use to all sections of the community alike, the information contained in it being unobtainable in any other publication. Two small handbooks are worthy of mention in connection with Tropical work, "The Maintenance of Health in the Tropics," by Professor Simpson, published under the auspices of the London School of Tropical Medicine, and "'Verb. Sap.,' on Going to West Africa and Nigeria." These are both intended for the general public. As a handbook suitable for travellers, missionaries, &c., containing in simple language all that is essential for such to know, Professor Simpson's book would be hard to beat. "Verb. Sap." is vastly interesting and as one reviewer says, "is a handbook full of apparently tedious detail, yet such are its charm and actuality that one reads it from cover to cover with real pleasure, though one no more thinks of going to West Africa or Nigeria than of going to the moon. For the adventurous spirits who are venturing into those fearsome localities the volume is worth its weight in gold, since a study and mastery of its contents may well make all the difference to them between this world and the next." We note that Mr. Worth's book on "Squint" has run into a second edition, and has been improved by additional illustrations, making it still more valuable. Mr. J. Hutchinson, jun., has

a small volume on "The Surgical Treatment of Facial Neuralgia," which should be of use to surgeons having to operate for this troublesome complaint. This firm has also some smaller, but not less interesting, publications, among which we may mention "Eye-Strain and Headache," by Simeon Snell; "Adenoid Growths of the Naso-Pharynx," by Garry Simpson; "Clinical Records of 'Light' and 'X-Ray' Therapy," by Dr. Stopford Taylor, beautifully illustrated; also the *Sanatoria Annual* for 1905, an attractive-looking book, which has been greatly improved by the division into two separate sections of the Sanatoria which are free and those to which admission is obtained in the ordinary way. This work, we believe, had its origin in the pages of our own Journal. Among Journals, that of the Royal Army Medical Corps is most creditably produced; when bound it makes a handsome volume, the whole get up, printing, illustrating, and binding being exceptionally good. Here are also to be seen various case-books, charts, and account books, all of which appeal specially to the profession.

Messrs. J. N. Bishop and Sons (13, Cooper's Row, Crutched Friars, E.C.).

General Wholesale Agents for Ackerman-Laurance's Sparkling Saumurs and A. L. Boiteau and Co.'s Pure Grape Cognac Brandies.

This firm showed two articles, which we should say, from a clinical point of view, are more necessary to medical men than many medicines, to assist in building up the strength of the invalid after the crisis is passed, and perhaps more often of greater use as a means of saving life when the vitality of the patient is at its lowest point. These brands are Ackerman-Laurance's "Brut-Royal," and A. L. Boiteau and Co.'s "Brut-Cognac." As their names imply, they are both shipped "Brut," *i.e.*, without any added sugar or other sweetening matter, the "Brut-Royal" is the pure juice of the grape, and the "Brut-Cognac" a pure grape brandy distilled from wine only, in fact, they are both pure in every way. Both the articles are now to be found at all the principal wine merchants, stores, &c., throughout the United Kingdom, and also in many of the merchants' stores in the British colonies.

The Blickensderfer Typewriter Company (9, Cheapside, London, E.C.).

The Blickensderfer Typewriter Co. showed a collection of their well-known typewriters, the exhibit including: One latest model, No. 5 Blick, foolscap size, in oak portable case. One latest model, No. 7 Blick, foolscap size, in polished wood case, also portable. One large brief size Blick in similar case. One No. 5 foolscap Blick in "Elite" portable leather travelling case, and one No. 7 foolscap Blick in literary leather travelling case, both with compartments for stationery, &c., also portable. One "Service leather travelling case for No. 7 model, portable, with compartments for stationery, &c. One No. 5 "Handy" leather case. One "Army" wood travelling case for No. 5 model, with compartments for stationery, &c., also portable. One gold-plated No. 7 model "Blick." One complete range of all the Blickensderfer interchangeable types which fit any Blick machine. Also Blickensderfer Duplicators, &c. We can from personal knowledge and use thoroughly recommend these typewriters, especially the No. 7. It is extremely light, portable, and of thorough sound workmanship throughout.

Messrs. Brand and Company, Limited, Mayfair Works (74-84, South Lambeth Road, Vauxhall, London, S.W.).

The name of Brand is well known in every household, and this celebrated firm had an attractive display of their various specialties for invalids; consisting of Essences of Beef, Mutton and Chicken, Concentrated Beef Tea and other Broths, Meat Juice, Turtle Soup, Beef Tea, Mutton and Chicken

Jellies, Savoury Meat Lozenges, Extractum Carnis, Beef Bouillon, Beef Tea Tabules, Invalid Soups, &c., also their A1 Sauce. All these preparations are so well known and esteemed that it is unnecessary to add anything in their favour.

Burroughs, Wellcome and Co. (Snow Hill Buildings).

Prominent in the exhibit of the above firm are "Tabloid" Medical Equipments for the pocket. A very high state of perfection has been attained in the manufacture and fitting of the various cases. The hypodermic and other products with which the cases are supplied are of proved efficiency and exhibit the exquisite finish associated with all the products of Burroughs, Wellcome and Co. "Tabloid" Hypodermic Cases can be supplied with the B., W. & Co. All-Glass Aseptic Hypodermic Syringe or with the ordinary pattern patent syringe. "Welcome" Brand Serums, comprising Diphtheria Antitoxic Serum, ordinary and high potency; Antistreptococcus Serum, Polyvalent, and Anti-tetanus Serum were shown. These serums are produced at the "Wellcome" Physiological Research Laboratories, under conditions controlled by a highly organised scientific staff. Burroughs, Wellcome and Co. act as distributing agents. Compressed bandages and dressings are now issued under the "Tabloid" Brand, and a selection of these were exhibited. These bandages, dressings, &c., are subjected to a very great pressure, under which they assume a rectangular shape, highly convenient for packing and for avoiding waste space in storage. Bandages in the ordinary open-wove material, or in flannel, as well as of the triangular (Esmarch) pattern, are supplied. Compressed cotton wool, plain or medicated; compressed gauze, double cyanide or sal alembroth; compressed lint, plain or boracic; and compressed sanitary towels of four sizes may also be obtained. "Kepler" Malt Extract with hæmoglobin is a useful preparation for administering the natural iron constituent of the blood. In this preparation the hæmoglobin is in a condition favourable to rapid assimilation without interference of digestion. "Wellcome" Brand Chloroform possesses special features of interest. It is particularly characterised by containing a small but definite amount of ethyl chloride, which is known to exert a marked beneficial influence on its action as an anæsthetic. It is supplied in bottles provided with a special contrivance to facilitate dropping the chloroform on the inhaler. A wide selection of "Tabloid" medicinal preparations, and of "Soloid" antiseptics and anæsthetics were displayed. The Standardised Liquid Extracts ("Wellcome" Brand) are worthy of mention. The alkaloidal strength of each being clearly indicated, they may be prescribed with confidence. A full range of "Hemisine" products indicate the means by which this *dry*, staple preparation of the active principle of the suprarenal gland may be administered. The above are some of the more recent productions of this firm; many other preparations were shown, but they are so well known that it is needless to specify them.

Callard and Co., Food Specialists, 74, Regent Street, London, W.

The display of this firm comprised new starchless and sugarless preparations to supersede the old gluten foods. Among the preparations were: Starchless and Sugarless Biscuits, Breads, Cakes, Starchless and Sugarless Fruits, Jam, Marmalade and Jellies, Starchless and Sugarless Milk, and other beverages, thus offering the sufferer from diabetes a considerable variety in his diet.

Messrs. Cantrell and Cochrane, Ltd. (Dublin, Belfast, Glasgow, and London).

Mineral waters alone are not generally the most satisfying of beverages. Either they do not quench the thirst wholesomely, or their taste is insipid,

and few indeed could justly claim to be absolutely pure. But it is interesting to find that one at any rate stands apart from the rest as being distinctly superior. Cantrell and Cochrane's Ginger Ale is what one might call "the ideal drink." It is as clear and sparkling as champagne, delightfully palatable, pure beyond question, and entirely free from alcohol. Its origin is certainly unique. The famous St. Patrick's well in Ireland has for ages been renowned for the health-giving properties of its waters. Clear and sparkling with their own natural beauty, these waters come bubbling from the depths of the earth to this inexhaustible well, and it is this cool and crystal water that forms the basis of Cantrell and Cochrane's Ginger Ale. Then, too, the manner in which this beverage is compounded is a revelation in modern manufacture. The process has been brought to such a pitch of perfection that the beverage is made to retain its freshness for an indefinite period, long after it has been uncorked. None but the finest ingredients are used, and the care with which cleanliness is observed throughout the whole process of manufacture seems almost carried to extremes; but it ensures absolute purity and its reputation as a dependable drink is thereby maintained. Its preparation is such that commends it to the Medical Profession, especially in cases where sweet drinks cannot be recommended. Although it has the taste of Ginger—a valuable stomachic, it is not so strong as to be unpleasant. It is an ideal drink for hot weather, as it cools and refreshes, but does not chill. The fact of Cantrell and Cochrane, Ltd., having gained in open competition 32 Gold and Prize Medals for the superiority of their Aerated Waters, proves the existence of a distinctly superior composition.

Messrs. Edward Cook and Co, Ltd. (East London Soap Works, Bow, London, E.).

Messrs. Edward Cook and Co. showed a varied collection of Soaps, among which we noticed "Throne" Toilet Soap. This on examination appears to be everything they claim for it, an absolutely neutral "Super-creamed" Soap, fresh from colouring matter, and delicately perfumed. It is very emollient and has a softening, creamy lather which renders the soap peculiarly pleasant and soft feeling in use. Their "Hygeso" is a hygienic Tooth Soap, which contains a large quantity of tincture of Rhatany combined with a pure neutral soap and is a very useful dentrifice. It is put up in a box specially designed for it, the great feature being handiness and cleanliness. The "Riviera" Soap is too well known to need further comment, except to add that the quality is well maintained. The "Asepso" or Antiseptic Soap, for use under proper direction by a qualified medical man, is put up in three strengths, containing 3 per cent., 1 per cent. and a ½ per cent. of Biniodide respectively, and is a rapid and efficient steriliser. Their "Carbolic" and "Coal Tar" Soaps are all they claim to be and are carefully prepared, neutral and non-irritant. Messrs. Cook and Co. are so confident of the merits of their productions that they offer to send to qualified medical men useful samples without charge and postage free, on receipt of their professional cards.

Messrs. Cooper and Company (80, Gloucester Road, South Kensington, and 24, Sloane Street, Belgravia, S.W.).

An attractive display was made by this enterprising firm. Pure "Oxycarbonated" Mineral Waters: "Oxycarbonated" waters are a great improvement on the ordinary carbonated mineral waters, the more or less lowering effects of carbonic acid being counterbalanced by the stimulating properties of oxygen. These waters are aerated with carefully purified carbonic acid and oxygen gases by patent process, and are prepared with organically pure distilled water. Messrs. Cooper and Co. have erected the most modern machinery for the manufacture of aerated waters, and special apparatus for

the production of pure distilled water. "Globenaris" Table Water, a pure, sparkling, and refreshing water. "Globenaris" Water is distilled water aerated with oxygen and carbonic acid gases by Cooper and Co's. patent process. It is especially adapted for general use, being pleasant, refreshing, and not "lowering." "Globenaris" Water is beneficial as a mild liver stimulant, and as a corrective where there is a rheumatic or gouty diathesis. Supplied in porcelain-lined syphons and bottles (quarts and pints). Tonic "Globenaris," Magnesia, Soda, Seltzer, Potash, Lime Water, Vichy Water, Oxygen Water, &c. The above are supplied in porcelain-lined syphons, thereby avoiding all possibility of metallic contamination. "Oxygen" Water: Distilled Water aerated with pure oxygen gas. Supplied in bottles and splits. Aerated Waters prepared in any strength or combination, as desired by the medical profession. Emulsio Ol. Morrhuæ c̄ Lactophosph. (Bridges). Contains pure cod-liver oil with lactophosphates. "Globena" Meat Juice: Prepared from the finest English beef, the albuminous principles being entirely retained. "Globena" Beef Essence; "Globena" Chicken Essence; "Globena" Mutton Essence; "Globena" Turtle Essence; "Globena" Veal Essence. These essences consist solely of the juice of the finest meats. Supplied in glass jars. "Globena" Pure Beef Tea (Concentrated). "Globena" Meat Lozenges: A concentrated meat lozenge of delicate flavour, furnishing in the smallest possible bulk the maximum of nourishing and easily digestible food. "Globena" Beef and Malt Wine: A nutritious and strengthening tonic wine. "Globena" Grape Jelly: An agreeable and nutritious jelly prepared from grapes. Supplied in glass jars. "Cachoids": Very flexible, tasteless, and readily soluble wafer capsules. They form an efficient means of administering nauseous and insoluble powders, and those the action of which is impaired by solvents; as "Cachoids" of Quinine, Antipyrin, Salipyrin, Sulphonal, Phenacetin, Bismuth, &c. "Globules" (soft gelatin capsules): "Globules" contain accurate dosage of medicament, are readily soluble, and from their shape and flexibility are easily swallowed. Cascara, Sagrada, Creosote, Guaiacol, Cod-liver Oil, Castor Oil, Ichthyol, Pepsin, &c. "Capsules" (Glass): Encased in cotton-wool and silk. Amyl nitrite, Bromide of Ethyl, Iodide of Ethyl, &c. "Liquor Quininæ Salicylatis": This preparation contains in each fluid drachm one grain of the natural Salicylate of Quinine. It has given excellent results in the treatment of gout, rheumatism, migraine, malarial fever, and allied complaints. The solution of this salt of Quinine is more rapidly and effectually absorbed than when administered in powders, pills, or suspended in a mixture. "Oxycarbonated" Fluid Magnesia: This form of administration of a popular medicament combines all the advantages of the older preparations of fluid magnesia with those accruing from the process of oxycarbonation, which are referred to under "Oxycarbonated" Waters. Ext. Sennæ Leguminæ Liq.: A mild aperient. Pastil Menthol. Co. These pastils contain cocaine, menthol, and red gum. Useful in cases of inflammation of the mucous membrane. "Pastil Heroini": $\frac{1}{14}$th grain, &c. "Sinapine Tissue, or Mustard Leaflets": This is a convenient form of mustard plaster, as it is easily applied, quick in action, and does not blister the skin. Syr. Glycerophosp. Co.: The Glycerophosphates have a marked stimulating power on the nervous system, and a distinct accelerating influence on the digestive powers, improving the general nutrition. Elixir Terpini et Heroin Co.: Heroin exerts a powerful action on the respiratory organs, acting as a specific in all forms of cough. Syr. Heroini Co., Tinct. Kolæ Co. Sterilised Dressings (Cooper and Co.): Sterilised Gauzes, Lints, and Wools. Each packet is wrapped in parchment-paper and placed in an air-tight, dust-proof cartoon. Oxygen Gas (Pure) for Inhalation. In cylinders of 10 feet, 20 feet, and upwards. Fitted with special reducing valve.

Messrs. Cosenza and Co. (95, Wigmore Street, W.).

Messrs. Cosenza and Co. exhibited the popular Maggi specialities, which include the Maggi Essence, Maggi's Consommé and Cross-Star Soups.

Maggi's Essence is a very highly concentrated extract, which gives instantly a savour and delicacy of flavour to soups, sauces, gravies, stews, hashes, &c., &c. It is not to be cooked, but be added at time of service. It must be used very sparingly, and should be added drop by drop until the full amount of flavour, according to taste, is obtained. Maggi's Essence is an unique preparation of the highest culinary importance, and serves also as an appetiser and a valuable aid to digestion. It has nothing in common with any of the ready-made sauces and must not be used as they are. It is very economical as, owing to its method of employment, a bottle lasts a long time.

The Consommé is a solidified clear soup, enclosed in air-tight gelatine capsules, and is instantly dissolved in boiling water.

The Cross-Star Soups, which number twenty-four varieties, are desiccated soups put up in tablets, each of which makes one pint of soup. They require some cooking, but no addition but water is needed.

One tube makes three-quarters of a pint of perfect clear soup, no addition or seasoning being required.

F. Davidson and Co. (140, Great Portland Street, London, W.).

Messrs. F. Davidson and Co., with their usual enterprise, were again showing something new and useful to the profession. Oculist's trial cases, with their new patent lens mount, looked particularly attractive. Each *class* of lens, being distinguished by a different coloured celluloid disc, which is inserted in the lens ring, is readily distinguished. Dr. Dundas Grant's model throat, with its collection of fifty illustrated cases, attracted much attention. The "electric ear," made from a suggestion by the same doctor, is clearly useful to enable one to acquire and retain dexterity in ear surgery. Dr. Ball's electric otoscope is the best thing of its kind we have met with. A varied collection of ophthalmoscopes was also shown.

Messrs. Down Bros., Ltd. (21, St. Thomas Street, Borough, S.E.).

A large and varied collection of surgical instruments and appliances was shown by this firm. All were characterised by the excellence and high finish for which Messrs. Down, Ltd., are celebrated, and the stand formed a display which attracted a large number of visitors throughout the evening.

Messrs. Duncan, Flockhart and Co. (143, Farringdon Road, London; 104-108, South Cannongate, Edinburgh).

The numbers to be seen continuously around this stand fully showed how alive are the members of the profession to the excellence of this firm's preparations. Among these were—Anæsthetics: Chloroform, Duncan's Pure, S. G., 1·490. Prepared entirely from British Ethylic Alcohol. Practically non-decomposible under any circumstances. Chloroform, Duncan's Methylated, S. G., 1·490. Prepared entirely from Methylated Spirit. Chloroform, Blue Label. Prepared from Acetone. Ether Purificatus (Duncan's), S. G., ·720. Manufactured from Ethylic Alcohol. An absolutely pure Ether. Specially prepared for anæsthetic purposes. Ether Purificatus, S. G., ·720. Prepared from Methylated Spirit. Ethyl Chloride, Duncan's Chloryl Anæsthetic (absolute Ethyl Chloride). Perfectly free from Hydrochloric Acid, empyreumatic bodies and ethers. Possesses a fragrant ethereal odour. The

vapour is non-irritating. To ensure satisfactory results it is essential that a perfectly pure drug should be used. Supplied in automatic cylinders containing 60 cc., and in glass capsules containing 3 and 5 cc. Inhaler (Ethyl Chloride). The "Simplex" Inhaler, suggested by Dr. T. D. Luke, Anæsthetist to the Royal Infirmary, Edinburgh, is at the present time, we believe, the most satisfactory inhaler for Ethyl Chloride. Its great advantage is its simplicity; there is really nothing to get out of order. It can at any moment be adapted to the Ether Chamber of a Clover, and the Ethyl Chloride-Ether sequence used. Capsules (Flexible Gelatine). Nearly every variety of drug can now be obtained in this form. Notably Blaud Pill Capsules, which are of guaranteed strength, and put up in one, two, and three pill Capsules, and in various combinations. Soaps Baumol, Superfatted 3 per cent., and delicately perfumed. Described by the Physician for Diseases of the Skin, Edinburgh Royal Infirmary, as "An extremely pure soap, and one which keeps admirably." Baumol Medicated Soaps; Baumol Carbolic Soap, 10 per cent.; Baumol Coal Tar Soap, 6 per cent.; Baumol Resorcin and Salicylic Soap, of each 3 per cent.; Baumol Sulphur and Salicylic Acid Soap, 10 per cent. Duncan's Fluid Soap (Sapo Mollis Peroleat Liq., Duncan). A superfatted neutral Potash Soap, possessing a very high degree of cleansing power. Duncan's Sapo Antisepticus Ætherius. A valuable antiseptic disinfecting wash, containing 1 in 1,000 of Red Iodide of Mercury. Very useful in preparing skin areas prior to a surgical operation. Compressed Tablets, Aromatic Throat Tablets, containing Benzoic Acid, Eucalyptol, Menthol, Aniseed and Cocaine. Heroin Comp. Tablets, each contains one grain Terpene, Hydrate, and $\frac{1}{10}$ grain Heroin Hydrochlor. Phenacetin and Caffein Cit. Tablets, Compound Hypophos Tablets, Easton's Syrup Tablets. Aromatic Medicinal Tablets of Calomel, Grey Powder, &c., delicately flavoured. Very suitable for administration to children. Perchloride of Mercury Tablets, in two strengths, 1 in 1,000 and 1 in 4,000. Both contain a small amount of colouring matter, so that the solution cannot be mistaken. Pure Carbolic Acid Tablets, 20 grains in each. Sulphate of Zinc Tablets, for preparing the old, useful astringent Lotio Rubra. Douche Tablets. Nasal Douche Tablets, Antiseptikos Tablets (Nasal Pharyngeal), Antiseptikos Douche Tablets, for Vaginal Douche. Special Preparations. Bismulait (Mist. Bismuth Alb.). A uniform palatable and amorphous preparation of Bismuth. Each fluid drachm contains the equivalent of 5 grains of oxycarbonate of Bismuth. Elixir Fruct. Laxativ. An elegant and mild aperient. Composed of Senna, Cascara, Tamarinds, and Cassia, with the agreeable flavourings of other fruits. Elixir Terpo Heroin Co. (Duncan). A useful combination of these two remedies, in cases of Phthisis and Bronchial Catarrh, where Morphia is contraindicated. Mist. Pepsin Comp. c. Bismuth (Duncan). Each fluid drachm contains 2 mins. Hydrocyanic Acid with Opium and Nux Vomica. Can be had without Opium. Compound Petroleum Emulsion. Contains the finest Petroleum, combined with the Hyphosphites of Lime and Soda. Antiseptic Dermolia (Duncan). An emollient antiseptic cream, containing Zinc Oxide, Carbolic Acid 1 per cent., Thymol, Woolfat, &c., delicately perfumed. Antiseptic Dusting Powder (Duncan). Composed of Zinc Oleate and Boric Acid in combination with pure wheaten starch, delicately perfumed, and is in a fine dry powder. Supplied also without perfume. Unguentum Antiseptic (Duncan's Antiseptic Dressing). A Zinc and Boric Ointment combined with suitable antiseptics, especially prepared for dressing wounds, and for general surgical purposes. Unguentum Pini Sedativ (Duncan). Composed of a modified form of Zinc Ointment, in combination with a mixture of the various Pine Oils. Emp. Belladonnæ Liq., (Duncan). A fluid Plaster of great convenience, as it can be applied without trouble in a few minutes. Lotio Boracis Comp. Conc. A carbolated antiseptic lotion, being a combination of Boric Acid and Phenol. A useful gargle for Septic throats, and diluted with water is a very refreshing mouth-wash.

Messrs. S. W. Easton and Son (62, Great Portland Street. W.).

This firm, as usual, were well to the front with an exhibit of up-to-date requisites in Medical Stationery and Consulting Room Furniture. We were particularly pleased with the latest pattern of the "Gunn" Sectional Bookcase, and were given to understand that not only have several new patterns been added, but the prices of all sections have been considerably reduced, owing to the great increase in the sales of this deservedly popular article. The Bookcases are not only available for case-books and works of reference, but are extremely useful for keeping surgical instruments, dressings, &c. S. W. Easton and Son also showed some excellent Filing Cabinets, particularly for case-sheets and records, and we understand that they are glad at all times to give advice to practitioners who desire to adopt the latest means of filing records of their cases or visits. This exhibit also included an interesting collection of Professional Account Forms, Appointment Cards, Note Papers, Prescription Sheets made up into blocks, as well as a good display of the latest novelties in Fountain Pens; amongst them we tried a new pattern of De La Rue's Pelican Pen, which can be carried in any position in the pocket without the slightest possibility of leakage.

E. Gallais and Co.

Samples of Ackerman-Laurance's Sparkling Saumur were shown by Messrs. E. Gallais and Co. These excellent wines are beginning to be drunk by a discriminating public, in preference to the more expensive brands of champagne. Dietetically there is no reason why good Saumur should be inferior to champagne, and it is certainly very much more wholesome than cheap and inferior brands of champagne. We can strongly recommend this wine for invalids, especially where expense is a consideration. Messrs. Gallais also showed some Brut Cognac of Messrs. A. L. Boiteau and Co. In these days of doctored alcohols it becomes important to know where to get a good sound and genuine brandy distilled from the grape. From the *Lancet* analysis it is evident that this brandy is a genuine and wholesome article.

Hedley and Co. (92, Harrow Road, Leytonstone, London).

The exhibits on this stand included "Pure" Ethyl Chloride, for local anæsthesia; Chemically "Pure" Ethyl Chloride, for general anæsthesia; "Pure Ethyl" Chloride Solutions. Messrs. Hedley and Co. guarantee their Ethyl Chloride to be *absolutely pure*, and not to decompose, and that it contains no bromide of ethyl or other dangerous drug, and to be absolutely free from all admixtures. The value to the medical profession of this guarantee can be estimated from the facts that Hedley and Company are not irresponsible selling agents for makers in other countries, but are the *actual makers*, and confine themselves to the manufacture of this *one drug alone*. They were the pioneers of this manufacture in Great Britain, having made *and sold* Ethyl Chloride since 1896. "Pure" Ethyl Chloride (Hedley) is supplied in glass or metal tubes of 55 and 110 grams capacity, and also in metal cylinders. The tubes are supplied with straight or bent necks, fitted with automatic spring or screw cap stoppers, and with sealed or refilling ends. The powerful spring used in Hedley's Patent Stopper removes a fruitful source of complaint, for which purpose it was designed, viz., leakage of vapour or contents. Consequent waste with this stopper is absolutely impossible. Solutions are made of Pure Ethyl Chloride (Hedley), c. cocaine, which is useful in dental work, and also c. carbolic acid, c. idoform, and c. menthol, these latter being invaluable as antiseptics and in the treatment of septic conditions of the throat, &c., the anæsthetic on evaporation leaving behind a film of either drug, evenly distributed over the parts to which the spray has been applied. Chemically "Pure" Ethyl Chloride (Hedley) for *general anæsthesia*, is put up in graduated 50 ccm. glass tubes; also in 3 and 5 ccm. bulbs, adapting it to use with any apparatus on the market. The Hedley Inhaler. This is

a perfect inhaler for the use of Pure Ethyl Chloride. It has a reversible bag, and is aseptic throughout. It combines perfect efficiency with simplicity. It is easily cleaned, and has no valves, no screws, no loose parts to be lost or to get out of order. Messrs. Hedley and Co.'s factory is at Leytonstone, London, and is fitted with a plant designed and installed on the most modern and advanced principles.

The Holborn Surgical Instrument Comany (26, Thavies Inn, Holborn Circus, London, E.C.).

This firm exhibited an assortment of up-to-date instruments, including the following, specially made for the surgeons named: Mr. A. E. Barker's Syringe for Local Analgesia, 21s. Mr. Lockhart Mummery's Rectal Dilators, 4s. each. Lockhart Mummery's Rectal Speculum, 8s. 9d. St. Mark's Hospital Pattern Rectal Speculum, 9s. Attwood Thorn's Improved Snare, 17s. 6d. Sir Charles B. Ball's Pedicle Clamp, £2. Also the following instruments: Guy's Hospital pattern Budin's Tube, 6s. 6d. Artery Forceps as now used by Professor Kocher, of Bern, 3s. Mayo Robson's Stomach Clamp Forceps, 7s 6d. Berkley Moynihan's Stomach Clamp Forceps, 13s. 6d. Doyen's Compression Forceps with very elastic blades, 8s. Kocher's Large Stomach Clamp, 20s. Kocher's Clamp for pyloric end of Stomach, 10s. These instruments appear to be admirably made and finished, and the prices will certainly bear comparison with those of other firms.

Hooper's Elastic Water or Air-Beds and Cushions (Hooper and Co., 7, Pall Mall, East, London, S.W.).

These beds and cushions, being of solid elastic rubber, conform to every movement and contour of the body, thereby giving perfect muscular relief. They are invaluable in cases of paralysis, consumption, fevers, rheumatic and spinal affections, the prevention and cure of bedsores, and the general comfort of bedridden patients. Beds and cushions may be hired in non-infectious cases. Awarded the only Prize Medal International Exhibition, 1862, also First Class Award at the International Medical and Sanitary Exhibition, London, 1881.

Messrs. T. C. Hodgkinson (New Address) 186, Goldhawk Road, Shepherd's Bush, W.

This exhibit, although small, proved as well worthy of attention as in former years. The Electro-Neurotone apparatus is specially designed to permit medical men and their patients to apply a "high tension" current to any portion of the body, without the usual disability of troublesome single electrodes, and change of polarity. The Electro-Neurotone is now well known to the leaders of the profession, especially in Bath, Buxton and Harrogate, and in the most "up-to-date" Hospitals and Medical Institutions all over the kingdom. Class "A" Neurotone, which is specially designed for professional use, embodies all that a busy practitioner values in an Electro-Medical apparatus. The Class "O" instrument is intended for patients' own use, and has now been prescribed in thousands in this country for the relief of Neuralgias. Neuritis, and various forms of Gout, and even Rheumatoid Arthritis. Mr. T. C. Hodgkinson, the inventor, and now sole proprietor, was in attendance to demonstrate the merits of the system to new enquirers. He was also exhibiting some completely new and novel apparatus, which is now being patented. A very small and particularly neat instrument for face massage, which should be of great service also to Throat and Ear Specialists. There was also a most perfect model of an Electrical Hair-brush, in which the metal bristles are so connected with the coil as to ensure a perfect electrical circuit in each bristle regardless of the angles at which they might be deflected. This seems to have solved a problem which has been engaging the attention of

electrical experts for some time. The stand, which was placed upon the stage, owing to want of space in the hall, was prettily decorated, and during the evening found many appreciative visitors.

The Icilma Co., Ltd. (142, Gray's Inn Road, London, W.C.).

This firm exhibited Selama Water, a remarkable natural water from Algeria. The action of the oxygen of the air on it sets free SO_2 and HFl in a nascent state, and it has been found to be useful for swellings, moist eczema, chronic sores, and especially for chronic irritations of the eyelids. Taken internally it is slightly laxative and very diuretic. They also show Icilma Water, a slightly oxygenised form of Selama Water, Icilma Fluor Cream, and Icilma Natural Water Soap, vehicles of Selama Water, and partaking of its advantages. There is also a Jelly for piles called Amel Jelly, compounded from Selama Water and Hamamelis.

Messrs. Ingram and Royle, Limited (26, Upper Thames Street, London).

This firm was represented by a display of the popular State springs of the Vichy Waters, Grande Grille, Hôpital and Celestins. The chemical constituents of these waters are very similar, their chief characteristic being the presence of a large percentage of sodium bicarbonate and pure carbon dioxide. The merits of the Vichy Waters are undisputed in congestions of the stomach, liver and intestines, and various gouty conditions.

International Plasmon, Ltd. (Farringdon Street, E.C., and Duke Street, Grosvenor Square, W.).

Plasmon is soluble caseinogen retaining the original organic characteristics of milk albumen. Plasmon contains all the original organic salts which constitute an essential feature of living albumen. The solubility of Plasmon is not secured at the expense of its alimentary properties. No other milk preparation has the above-named characteristics. Plasmon is indicated in Wasting Diseases, Anæmia, Febrile Diseases, Tuberculosis, Enteric Fever, Diseases of the Alimentary Tract, Rickets, Acute Indigestion, Stomach Disorders, &c. Plasmon should be used wherever a highly reliable and quickly digested food is required. Plasmon is practically free of sugar and fat. Plasmon-Granulated Powder. The pure soluble Proteid of Milk, in a dry granulated powder form, manufactured by mechanical process, without the addition of any chemicals. It is soluble in water, milk, soups, &c., and is composed of 92 per cent. of proteid (8 per cent. being of mineral matter, phosphoric acid, phosphate of lime, &c., in organic form). Plasmon, being tasteless and odourless, can be added to any and every form of food in a dry or dissolved form. Plasmon Biscuits contain 20 per cent. of Plasmon. Plasmon Diabetic Biscuits, absolutely free from starch or sugar. Plasmon Chocolate contains 25 per cent. of Plasmon. Plasmon Cocoa. Highly nutritious, restorative, absolutely pure, delicious; therefore an ideal beverage and a perfect food for all, especially for invalids during, and convalescents after, exhausting diseases. Plasmon Cocoa is also strongly recommended for rickety and weedy children. Beef Plasmon. The Ideal Nitrogenous Food. Stimulating, digestible, and nourishing. Beef Plasmon combines the stimulating and restorative extractives of prime fresh beef with Plasmon, a soluble and readily assimilable form of pure unaltered albumen. Plasmon Arrowroot. Plasmon Arrowroot is composed of the purest arrowroot and Plasmon in dietetically suitable proportions. Plasmon Arrowroot is a highly strengthening food, and is specially suitable in cases of acute diarrhœa in children and adults; it is useful also in cases of chronic diarrhœa and dysentery, and in all conditions where a light nutritious diet is indicated. The chief require-

ments in cases of diarrhœa, particularly in children, is a form of nourishment which sustains the strength without aggravating the intestinal disorder. Plasmon Arrowroot at once controls the intestinal flow, and provides nourishment in a form which is absolutely non-irritating, well retained, and easily digested; it is quickly assimilated, and speedily revives and sustains the strength. Plasmon Oats, an admixture of Plasmon with oats, from which the greater portion of the husk and fibre has been removed. A highly nutritious food, easily cooked, and forming a palatable and economical preparation.

Keen, Robinson and Company, Ltd. (Denmark Street, St. George's-in-the-East, London, E).

Robinson's Patent Barley. A pure Farina of the finest Scotch barley. Barley water for summer drink for invalids and as a diluent of milk for babies, can be quickly and economically made from it. Sufferers from stone or gravel should drink freely of barley water. Barley water as a diluent of milk is being recommended by the medical profession generally. Robinson's Patent Groats. A pure Farina of the finest oats grown in Scotland. Gruel made with milk is most nutritious, delicious and digestible. Suitable for infants when weaned—as it produces bone and muscle—nursing mothers, invalids and the aged. Colman's Sinapisms are more effectual than those made abroad.

Messrs. Krohne and Sesemann (37, Duke Street, Manchester Square, London, W.

Messrs. Krohne and Sesemann's exhibit comprised a collection of Surgical Instruments and Appliances, including the following: Mr. C. B. Keetley's Splints for the lower extremities, Mr. Richard Lake's Oto-Masseur, Dr. James Mackenzie's Clinical Polygraph, K. and S. Chloroform Inhaler with Respiration Indicator, Aseptic, Hypodermic and Antitoxin Syringes, Improved Sterilisers for Catheters, Dressings and Instruments. The whole exhibit well maintained the reputation of the firm for the excellence of their instruments.

Messrs. Lamont, Corliss and Co. (11, Queen Victoria Street, E.C.).

Glycozone and Hydrozone. These two preparations, which are manufactured exclusively by Professor Charles Marchand (Graduate of the "Ecole Centrale des Arts et Manufactures de Paris," France), of New York, were being exhibited by the sole agents for the United Kingdom, Messrs. Lamont, Corliss and Co., 11, Queen Victoria Street, E.C. Both preparations have been analysed in the *Lancet* Laboratory and well reported on, and we understand, too, that the profession are employing both Glycozone and Hydrozone to an increasing extent and with excellent results. Glycozone is a stable compound, resulting from the chemical reaction that takes place when chemically pure glycerine is submitted to the action of fifteen times its own volume of ozone. It exerts a great healing action upon diseased mucous membranes, is harmless and always effective, being, according to the testimony of an eminent medical authority, the best known agent for the treatment of gastric ulcers and all inflammatory conditions of the alimentary canal. Hydrozone is a 30 volume solution of peroxide of hydrogen, free from excess of acids and barium salts. When brought into contact with any diseased surface, either of the skin or mucous membranes, or into contact with bacteria of any description, either internal or external, its decomposition takes place immediately, nascent oxygen is set free, the albuminous element of the unhealthy secretions is coagulated, the pus corpuscles are destroyed and those in formation utterly routed out of existence; the pus process is thus checked and the bacteria, as

well as their spores, are annihilated. One of the principal advantages of this antiseptic is that it is perfectly harmless to healthy tissue and can be taken internally without the slightest danger.

Messrs. Lemmon and Co., Ltd. (19, Hanover Square, W.).

One of the most interesting exhibits was that of Messrs. Lemmon and Co., Ltd. Their show dealt with what has now become an important adjunct in medicine and surgery, viz., Electricity, and their exhibit embodied every form useful to the medical man of the present day. They showed accumulators for light and cautery which possess the special features both of portability and reliability. Cystoscopes for examination, irrigation, and catheterisation of the ureters were shown, all of which gave excellent definition and were fitted with the special "cold" lamp. The Aero-urethroscope, by Mr. Pardoe, was greatly admired for its all-round utility and simplicity in use.

Especially noticeable were the various types of switchboards for light, cautery, galvanism, Faradism, electrolysis, &c., and the portable transformers appeared to be of excellent workmanship and design. There were also shown head-lamps, laryngoscopes, cautery handles, and, in fact, every possible application of electricity in illuminative instruments useful to the surgeon.

On the platform was exhibited a most excellent outfit for Röntgen rays, the working of which gave universal satisfaction. One of the best types of high frequency apparatus on the market was also to be seen working.

The practical demonstration of cystoscopy by means of a phantom bladder showed the high standard of excellence attained with the cystoscope.

Mr. H. K. Lewis, (136, Gower Street, W.C.).

Among the chief works on this stand may be mentioned a specially illustrated edition of Dr. Radcliffe-Crocker's "Diseases of the Skin," containing 70 additional plates; a new book on "Landmarks and Surface Markings of the Human Body," by Mr. Louis Bathe Rawling; Dr. H. Lewis Jones's "Medical Electricity," fourth edition, being the first volume in "Lewis's Practical Series," issued in 8vo form; in the same Series were shown also "Hygiene and Public Health," by Drs. Louis Parkes and H. R. Kenwood, second edition; "Public Health Laboratory Work," by Dr. H. R. Kenwood, third edition; Dr. Ashley Barret's "Dental Surgery," fourth edition; and Dr. A. H. N. Lewers' "Diseases of Women," seventh edition. Among other books were the last-named author's monograph on "Cancer of the Uterus"; Dr. H. R. Swanzy's "Diseases of the Eye," eighth edition; "The Extra-Pharmacopœia," by Mr. Martindale and Dr. Wynn Westcott, eleventh edition; "The Sterilisation of Urethral Instruments," by Dr. H. T. Herring; Dr. J. M. H. MacLeod's "Practical Handbook of the Pathology of the Skin"; Professor Osler's "Æquanimitas and other Essays"; a new edition (fourth) of "The Sanitary Inspector's Handbook," by Mr. A. Taylor, &c. A new Hæmatological Chart and also a Blood Pressure Chart, were also shown, with specimens of other charts, case-books, &c. The New Sydenham Society's "Atlas of Clinical Medicine," as far as at present issued, with vol. i. in two styles of binding, was also shown on this Stand, as was a selection of the Society's publications now available for members to choose from under the new rules just issued by the Council. Mr. Lewis also had a selection of a few of the more important recent text-books and works of reference of general interest, which may be had from the Circulating Library, or ordered from 136, Gower Street.

A. Lines and Sons (Broadway, Hammersmith).

The refreshments, as usual, were supplied by Messrs. A. Lines and Sons. These were carried out in their accustomed thorough manner, and showed the usual care and thoughtfulness of detail which characterises this firm.

The London Necropolis Company, Offices and Private Funeral Station, 121, Westminster Bridge Road, also 2, Lancaster Place, Strand; General Undertakers, Cremators and Embalmers, Proprietors of the largest Cemetery in the United Kingdom, Soulptors, Monumental Masons, &c. Inventors and Patentees of the "Earth-to-Earth" Coffin.

The business of the London Necropolis Company extends to all that pertains to the burial of the dead, including statuary and monumental masons' work, and, owing to the completeness of their arrangements and the extent of their resources, they are enabled to undertake the conduct of funerals to *any of the Metropolitan Cemeteries and to all parts of the United Kingdom*, according to a fixed and moderate scale of charges. The Cemetery, Brookwood, near Woking (established in 1851), is the largest and most beautiful in the kingdom.

The Manhu Food Company, Limited (Liverpool, and 23, Mount Pleasant, London, W.C.).

The Manhu Food Company, Limited, again displayed their excellent preparations of Starch-changed Diabetic Foods. The increased interest of the medical profession and the extended sales clearly prove the benefit derived by diabetic patients. Clinical evidence also has been received by the Company of the value of these Foods in the treatment of obesity and gastro-intestinal complaints. The Foods comprised: Flour for bread-making, and all purposes in which ordinary flour is used, Biscuits, Flaked Wheat and Flaked Barley for porridge, &c., Prepared Barley for barley water, &c., Barley Cocoa and Macaroni.

Messrs. Mayer and Meltzer (71, Great Portland Street, London, W.).

This exhibit consisted of a series of photographs of Operation Theatres, including those at University College Hospital, North Eastern Hospital for Children, Brompton Hospital for Consumption, all fitted with their furniture of original design, which they manufacture at their works in London. They also exhibited a series of their University Electric Lamps, which are in general favour all over the country. A large selection of the latest instruments in use by the leading laryngologists, rhinologists and otologists for treatment of Frontal Sinus Disease, Suppuration of Ethmoid and Sphenoid Cells and Antrum, Tubercular Disease of the Larynx, Deflected Septum by Killian's method and Mastoid Disease. Also a new Massage Apparatus for Tympanum, Salisbury Sharpe's Douche Steriliser, fitted in a strong bag, is a useful adjunct to the obstetrician; by an ingenious arrangement of the stand it can be used either as a steriliser for the forceps, &c., or as a douche for uterine or vaginal irrigation. With very few exceptions all the instruments and apparatus shown are manufactured by Mayer and Meltzer at their own factory (University Works, Dean Street), and they inform us that they will be pleased to show anyone interested the process of manufacture.

W. Martindale (10, New Cavendish Street, London, W.).

The following goods and preparations are worthy of mention: "Extra Pharmacopœia," eleventh edition. The firm has recently been preparing a large number of useful drugs and pharmaceutical preparations, and we suggest that medical practitioners should apply for a copy of their Complete Price List: Amyl Nitrite Capsules; Asthma Powder; Aurinaria Aural Bougies made with Gelatin or Cacao Butter basis (these are prepared with morphine, cocaine, carbolic acid, &c.); Boric Acid Cartons are convenient, as containing a weighed quantity (in two strengths) of pure boric acid for preparing fresh quantities of lotion; Cocaine Lanoline; Glycaphorm (Glycerole of Diacetyl-

Morphine Hydrochloride); Glycerole Glycerophosph. Co., useful to replace the syrup in cases where sugar is to be avoided; Lithion, a new preparation for use in the treatment of rheumatic affections; Lysoform Products, a large series; in addition to the Lysoform itself, Mouth-wash, Tooth Paste and Powder, Lysoform Dental Dressing, has just been placed on the market; Sodium Chloride Shells are convenient as containing 1 drachm of pure sodium chloride for producing a pint of normal saline; Syrupus Iodo-Tannicus, for use after tonsillotomy and for treatment in enlarged glands; Capsules of Hæmoglobin; Moss Preparations; Sterules Hypodermic; Analytical Outfits; Hypodermic Cases; Medicated Wools and Gauzes, amongst which Calcium Iodate is a novelty; Chalk's Bottles in Metal Cases, &c.

Moseley's Food (Foods' Limited, Stockport).

This food is a light straw colour, beautifully fine in grain, with the pleasant aroma of a dextrinised cereal. When prepared according to instruction it produces an appetising dish, characterised by an exceptionally pleasant and taking flavour. Notable points are: (1) The high percentage of proteid, showing that the choicest wheat has been employed in the manufacture of the food; (2) the large proportion of soluble carbohydrates present; (3) the presence of a due proportion of inert fibre and cellulose; (4) the richness of the ash in phosphates. The microscopical examination of the food show the starch granules to be thoroughly broken down and in a most digestible condition, and the bran particles were seen to be exceedingly fine. Experiments with the standard digestive extracts prove the food to be extremely digestible, the starch especially being rapidly converted into maltose. Moseley's Food possesses a very high standard of nutritive value and easy digestibility, and at the same time acts as a natural stimulant to the healthy action of the bowels, counteracting constipation without the irritating effect which characterises coarser cereal preparations.

Newton, Chambers and Company, Limited (The Laboratories, Thorncliffe, near Sheffield, and 331, Gray's Inn Road, London, W.C.).

Included in their exhibit was an assortment of their well-known and widely appreciated Izal Specialities. The properties of this preparation are unique in the annals of antiseptic surgery for:—(*a*) The active principle having a very high boiling point (commencing above 200° C.) the antisepsis is practically permanent at the ordinary temperature; (*b*) no inert compounds are formed with the tissues; (*c*) Izal appears to act as an epithelial stimulant, promoting healthy but not excessive granulations with speedy epithelial covering; (*d*) when used in a strength of only 1 in 200 it will destroy every variety of the most resistant bacilli in five minutes, while a dilution of 1 in 600 is sufficient to kill the *B. staphylococcus aureus* in five minutes. The Medical Izal is put up in glass-stoppered bottles of 4 and 8 ozs., and in Winchester quarts, and has proved itself to be exceedingly valuable in ozæna, typhoid, erysipelas, diphtheria, fetid bronchitis, abscesses and old sinuses; it is also a powerful deodorant in cases with an offensive smell. It is ideal in obstetrics. The Izal Perles are strongly recommended, as being a convenient form for internal use in typhoid fever and obstinate cases of diarrhœa. Izal Medical Soap is recommended for disinfecting the hands before and after operations, and for antiseptic purposes in the sick room. It is also a useful agent in the treatment of skin diseases. Izal Cream Bland and Emollient, a very convenient antiseptic application to the skin, and useful for rubbing on the bodies of fever patients during the period of desquamation. The Izal Vaporiser, for use in the Izal treatment of phthisis, croup, whooping cough, bronchitis, &c.

Messrs. Oppenheimer, Son and Co., Ltd. (179, Queen Victoria Street, E.C.).

Palatinoids of various Animal Substances, Powders and recent developments, have been issued by Messrs. Oppenheimer, Son and Co., Ltd., during the year 1904-1905, and those very interesting formulæ which have been developed owing to the kind suggestions of the medical profession during this period were shown at the exhibit. These include: Metramine Palatinoids. Metramine is a purified form of Hexamethylene tetramine, an ideal antiseptic for the genito-urinary tract, which splits up in the urine into formic aldehyde and Ammonia, thus rendering the urine alkaline and antiseptic. Metramine Compound Palatinoids, containing Metramine, Methylene Blue, Copaiba and Santal, are stated to be a specific in the treatment of ordinary Gonorrhœa. Suprarenal Gland Palatinoids, each containing the equivalent to 5 gr. of the gland, have been highly recommended as an aseptic form for the internal administration of this substance. Laxoin, a specially prepared pure Phenolphthalein. We can confidently recommend Laxoin as being absolutely free from the deleterious ingredients contained in the commercial article. It is an ideal laxative, stimulating the lower bowel in a manner similar to an injection of glycerine. Laxoin Palatinoids, 2 gr. each, and Laxoin Cocoids, tiny chocolates, are a most agreeable means for administering this to children. The strengths supplied in Cocoids are ½ gr., ¾ gr., 1 to 5 grs. Ferrous Carbonate with Hæmoglobin Bipalatinoids. The best means for administering organic preparation is the Bipalatinoid above mentioned. The Hæmoglobin is preserved in an absolutely fresh condition indefinitely, and the two ingredients ensure a double shot in the treatment of forms of Anæmia, so that whenever the organic Iron may be most effective and desirable, it can be administered. Pinheroin is a linctus containing Terpene hydrate 1 gr., Heroin Hydrochlor $\frac{1}{10}$th gr., with Essence of Canadian pine. The Terpene Hydrate is completely dissolved in the acid under pressure, and the Pinheroin is undoubtedly wonderfully successful in all kinds of coughs, laryngitis, bronchitis, &c. Liquor Xenine. It has been discovered that by a process of fermentation, the bitter principle of the Cascara Bark can be converted into an active one, therefore in Liquor Xenine a preparation is offered containing the fullest amount of active principle in a most active and pleasant condition. Aseptules of Renaglandin and Aseptules of Renaglandin Anæsthetic. These are little glass Capsules containing respectively ½ drachm of either of these solutions. Renaglandin is a natural solution of the active principles of the suprarenal gland. Renaglandin Anæsthetic contains 5 per cent. of Eucaine Lactate, thus when it is injected into the tissues, producing complete anæsthesia and a bloodless field for operation. Renaglandin and Renaglandin Anæsthetic are also supplied in aseptic containers which hold one ounce. A variety of Medicine Cases to suit the requirements of the general practitioner, medical missionary or traveller, and among this series was shown the actual personal medicine case carried by Dr. Koettlitz, the Chief Officer of the "Discovery" under Captain Scott, when visiting the Antarctic regions. This case, Dr. Koettlitz states, he carried on all his sleighing expeditions. A large quantity of Palatinoids and Bipalatinoids were supplied to the "Discovery" on the occasion of their voyage. The Universal Vaporiser is now being adopted by most of the large hospitals for Consumption and Sanatoria throughout Great Britain and the Continent. It reduces the liquids to a condition of smoke, and is especially useful for the administration of antiseptics into the air cells of the lungs, thus producing a bactericidal effect upon the bacilli, and preventing the progress of the disease. The Aerizer has been very extensively employed successfully in all diseases of the respiratory organs. With this the Neboline Compound No 23, containing Mucin 40 grs. to the fluid ounce, has been found exceedingly useful in dry catarrhs of the nasopharynx, as it practically supplies a physiological deficiency. The No. 21 Neboline Compound is a preparation for the treatment of Asthma, and is identical in composition

to that highly recommended by an American doctor. The Patent Hypodermic syringe is fitted with a vulcanite end to the solid plunger ground into the glass barrel. This can be completely sterilised with the needles within a few minutes whenever required for use. Since Motor Cars and Cycles have come largely into use with the medical profession, Messrs. Oppenheimer, Son and Co., Ltd., have laid themselves out especially to fill the requirements of all medical friends under such circumstances in the way of chests, handle-bar or stay-bar medicine cases required. These can be constructed especially to order of any material and fitted with a selection of their portable medicines as may be indicated by the doctor.

Messrs. Parke, Davis and Co. (111, Queen Victoria Street, London, E.C.).

Among the many exhibits of this celebrated firm we especially noticed Adrenalin, the blood pressure raising principle of the Suprarenal Gland, first isolated by Dr. Jokichi Takamine. Of inestimable value as a remedy for hay fever. Adrenalin Chloride Solution, Adrenalin Inhalant, Adrenalin Ointment, Adrenalin Suppositories. Antidiphtheria Serum: Submitted for examination in the Pathological Laboratory of the University of Cambridge, and certified as to antitoxin unit potency and freedom from micro-organisms. Acetozone: A powerful non-toxic germicide, for internal and external use. Digitalone: An aseptic, non-alcoholic, non-irritating, permanent solution of digitalis, specially prepared for hypodermic administration and physiologically standardised. Elastic Suppositories (Vaginal) Chloretone Compound: Antiseptic, astringent and derivative. Elastic Suppositories (Vaginal), Thiodine 10 per cent.: Composed of Ichthyol, Iodine, Hydrastine, &c. Ergot Aseptic: A physiologically assayed preparation for hypodermic use, free from acids, alkali, and spirit, and from ergotinic acid and extractive matter. "Eudrenine": The new local anæsthetic and hæmostatic for painless and bloodless operations. In ampoules and phials. Euthymol Preparations: Cream, Powder, Shaving Cream, Tablets and Tooth Paste. "Glaseptic" Nebuliser: An all-glass aseptic nebuliser, convenient, effective, and economical. Glycerin Suppositories: Contain 95 per cent. of pure anhydrono glycerin. Hypodermic Tablets, Syringes, and Pocket Cases. Liquor Sedans: A utero-ovarian sedative and anodyne. Medicine Cases and Chests, including "The Physicians'" Antidote and Emergency Case, and other new patterns for pocket, hand, or carriage use; also for missionaries, expeditions, camps, &c., &c. Standardised Fluid Extracts: Drug extracts standardised chemically or physiologically. Thermofuge: A cleanly and efficient substitute for poultices, compresses, packs, and fomentations. Typhoid Agglutometer: A portable test for the use of the physician in making the Widal Test. Uritone: Hexamethylene Tetramine, a urinary antiseptic, indicated in cystitis, pyelitis, &c. Veratrone: A physiologically tested and assayed preparation of Veratrum viride for Hypodermic or Internal administration; aseptic, and non-irritating.

Perrier, Ltd. (45 and 46, New Bond Street, London, W.).

Perrier Sparkling Water is now becoming so well known and is so frequently met with that it is almost unnecessary to describe it. It is a natural sparkling water characterised by its remarkable organic purity and by its light mineralisation (less than 4 grammes in 10 litres). The salts present consist almost entirely of bicarbonate and a very small amount of sulphate of lime. The lime salts render the water very palatable, its agreeableness being greatly increased by the faintly acid flavour of the pure natural carbonic acid which it contains.

Virol, Limited (152 and 166, Old Street. E.C.).

Virol is a complete food for children and invalids, and consists of an emulsion of red bone-marrow, malt extract, eggs, lime, and lemon juice. Virol therefore contains: Marrow-fat emulsified with carbohydrates, heat and force producers; red marrow, blood corpuscle former; albuminoids (uncoagulated), muscle builders and waste repairers; mineral matter (chemical food), bone and brain former. Virol is of peculiar value as a complete food, because rich alike in all three classes of repairing material: the nitrogenous, heat producing, and bone forming, derived from animal, vegetable, and mineral sources. In appearance and consistence it is like honey, and to the taste it resembles excellent toffee. Virol is entirely absorbed and digested. It acts as a digestive of starchy foods and is of delicious flavour.

Whitlock Automobile Co., Ltd. (Holland Gate, High Street, Kensington, W.).

The well-known firm, the Whitlock Automobile Co., Ltd., of Holland Gate, Kensington, W., among their exhibits showed one of their complete Whitlock-Aster Cars. This is a 10 to 12 h.p. two-cylinder Model, and has very accessible mechanically operated valves, easily removed by undoing radially slotted valve-heads. The chassis is exceptionally well designed, and will stand the most critical examination. It was fitted with an exceedingly handsome side entrance phæton body, fitted up in the very latest London style. The price of this Car is very moderate, being only £375, which includes five Lamps, and Hooter of the best quality, and a Kit of Tools—all ready for the road. Owing to their extreme silence and general reliability, the Whitlock-Aster Cars are unquestionably forging ahead of their competitors, and for all-round touring purposes are now quite unsurpassed. Their freedom of noise and the sweet running of the engine makes them specially suitable for town use, and it is noticeable the number of these convenient and popular carriages one sees in use round town.

There was also on view a two and four cylinder Motor, besides a three-speed gear, a Differential Coil, Carburettor and Radiator, all of the very latest pattern.

Great interest was displayed throughout the evening in these exhibits; the Aster engines being already so well known for their silent and easy running. We have had on the road for some months a Car similar to that on view, and although we have had in the past, experience of many makes of cars, we have never met with a two-cylinder so quiet and easy in the running and with such power on hills.

The Pathological Department of the West London Hospital, so ably managed by Dr. Candler, showed an interesting collection of the more recent pathological specimens from the Hospital. Specimens of Filaria recovered from the blood of a patient in the Hospital were also shown under microscopes.

NOTES AND NEWS.

ONCE more we have to congratulate the President and Council on the great success of the Annual Conversazione. The attendance was larger than usual, and the exhibition by the various firms who advertise in the Journal surpassed all previous occasions. In fact, this Annual Exhibition is now recognised by our advertisers to be such a valuable means of introducing new business, that every year a larger demand for space is sent in to the Editorial Secretary. This year every available inch of space was utilised, and the Secretary would have been glad of more. The time will soon arrive, if indeed it has not already done so, when the Council will have to seriously consider the question of space at the Exhibition, and either, as some would advise, follow up our success by engaging a larger hall, or, as an alternative, restrict the exhibits to our larger and more important advertisers.

IN this connection we would again ask our readers to render some return to the exhibitors, who went to considerable trouble and expense to give such an interesting display, by making use of our advertisement pages when in need of anything they may require, before ordering elsewhere.

A DISCUSSION has been raised in the *British Medical Journal* recently under the following heading: "The Sanatorium Treatment of Consumption—Is it worth while?" and one medical practitioner at least openly stated that in his opinion it was worthless, and that he had never seen a case cured by its means. Either his experience must be a strange one or his patients drawn from a special class, as assuredly the results up to now have been so good in early cases that we should have thought that there could be no room for doubt. The explanation probably lies in the fact that so many cases are not recognised and treated until they are in a fairly advanced condition; and until the importance of the recognition of the very earliest symptoms and their prompt treatment is more fully appreciated and taught, the value of the open-air treatment will occasionally be called into question. The discovery of an area in either apex of the lung in which there is harsh inspiratory or prolonged irregular expiratory sounds, together with an impairment of resonance on careful

percussion, and perhaps some pectoriloquy, should be sufficient to cause a provisional diagnosis of pulmonary tuberculosis to be made even through tubercle bacilli may not be present; and if these local signs are accompanied by evidence of impairment of health, loss of vigour and weight, no further hesitation should be felt, but the case should at once be treated as one of incipient tuberculosis.

This is just the time when the majority, if not all of these cases, may be said to be capable of cure, and undoubtedly if the sufferers could at this period be treated by means of the sanatorium method, the rate of mortality from pulmonary tuberculosis would be most materially altered. Unfortunately, many of these cases are allowed to progress until fever, hæmorrhage, and actual breaking down of lung tissue finally alarm the patient and his friends, and he is then sent off to a sanatorium, there to be only, in too many cases, temporarily patched up.

THERE is just now a considerable amount of attention being paid to the question of the physical degeneration of our race. Dr. R. Rentoul, at a meeting of the Medico-Legal Society, under the presidency of Sir William Collins, advocated most drastic measures for the cure of this supposed evil. The particular methods suggested were vasectomy and salpingotomy, and these were to be made compulsory for idiots and imbeciles, degenerates and drunkards, vagabonds, vagrants, prostitutes, and the children of these classes. This was seriously discussed by the Society, but the difficulty of arriving at a practical definition of "degenerates" and other vague terms was fully appreciated. Somewhat opportunely Dr. F. Tilden Brown has communicated to the New York Academy of Medicine some observations as to the sexual condition of patients who have been exposed to the action of X-rays. He asserts that after a series of exposures to the X-ray, all of these persons were rendered sterile, none of them, however, being aware of any change or deterioration in their potency. In one case treated for pruritus and known to have active spermatozoa before exposure, all traces of these organisms disappeared after treatment for some months, and then gradually returned. Observations by other workers tend to show that rabbits and guinea-pigs exposed to the rays lose all sexual power and become completely sterile.

If these observations are proved and established in the course of time, we may find the settlement of this question of the propagation of the unfit in the Crooke's tube. It

would certainly get rid of the objection of mutilation of the individual, and the fact that the effect is not permanent would be a further argument in its favour with some objectors.

THIS is the age of sensational scares in the cheaper Press, and one of the latest is that persons using public telephone offices might, through the mouthpieces, render themselves liable to infection from tuberculosis or diphtheria. We are glad to see that Dr. Collingridge, Medical Officer of Health for the City of London, has dealt with the question by removing a number of these mouthpieces from the public call offices, and sending them to Dr. Klein for bacteriological examination. Dr. Klein, after conducting a number of experiments on guinea-pigs, reported that none of them contained either tubercle or diphtheria bacilli, thus promptly disposing of this scare.

IN a series of communications to the medical papers on "one mark vaccination," several medical men have announced their intention of vaccinating with but one puncture, in order to compete with public vaccinators, who, by vaccinating gratuitously, get an introduction to their patients, but who are compelled to vaccinate in four places. Undoubtedly a very large amount of this inefficient vaccination is being done all over the country, the results of which will inevitably show themselves sooner or later more or less disastrously, we are afraid, both in the reliance which the patient will place on it for protection and in the arguments it will furnish the antivaccinators as to the uselessness of vaccination.

Without entering into the ethics of one mark vaccination, or the controversy between public and private vaccinators, it cannot be denied that the sooner it is stopped the better, as it affords but small protection, and gives a false sense of security to the patient. An easy method of preventing this would be to exact that in future every certificate of efficient vaccination to be accepted as such must be accompanied by a statement that there has been an insertion success of at least three places.

A CASE of considerable importance came before Mr. Justice Wills in May. The plaintiff purchased a milk business from the defendant for a large sum, the defendant representing the daily sale of milk to be 320 gallons at 4d. a quart. The

defendant, however, had been in the habit of removing the cream from a quantity of the milk, selling it, and adding the separated milk to the pure milk sold to the customers.

The plaintiffs sued for a breach of warranty, and Mr. Justice Wills, in giving judgment for the defendants, came to the conclusion that there was no offence in law in this proceeding. This is a most serious decision, as apparently a milkman may now mix good milk with skimmed milk without any fear of the consequences.

THE automobile show held at Olympia in the spring was full of interest to medical men contemplating the purchase of an automobile for their practice. We were particularly struck with the great advance which had taken place in the better provision for protection against the weather. For the well-to-do, landaulettes and coupés were to be met with on all sides, whilst for the man of moderate means there were several good designs. We still think, however, that the protected car for medical men at a moderate price of about £250 has still to be designed. That it can be built for that sum we have no doubt, and judging from the number of cars labelled for medical men, we should imagine that there was a considerable demand for such a car, which is well worth catering for specially.

Among those we particularly noticed were some exhibited by the Whitlock Aster Company, of High Street, Kensington. The chassis and engines are all constructed by the well-known Aster Company in France, and the bodies by Messrs. Whitlock, thus giving the desirable combination of a famous French chassis with an English built and finished body. Moreover, the Aster manager, Mr. Begbie, who is consulting engineer, is well known as a gentleman of great experience, and purchasers of these cars, therefore, not only have the advantage of seeing their carriage built and painted to their own specification and under their own eyes, but are also able to assure themselves that the engines and chassis are sent out tuned up to their best capacity. Their price compared with that of other makes of similar quality is certainly moderate.

JUST as we go to press we deeply regret to receive the news of the death of Professor von Mikulicz Radecki. Professor von Mikulicz, it will be remembered, delivered the Cavendish Lecture last year, and it is a strange and sad coincidence that the news of his death should arrive on the

anniversary of his visit to us. We feel sure that we express the feelings of the Society when we offer our sympathy and condolence to his bereaved relatives.

THE Secretaries and Treasurer would be very much obliged if members who change their address during the year would inform them of the fact.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 71, Holland Park Avenue, W.; those concerning business matters, advertisements, non-delivery of the Journal, &c., should be addressed to the Editorial Secretary, 77, Wimpole Street, W.

Authors desiring reprints of their articles published in the WEST LONDON MEDICAL JOURNAL are requested to communicate with the Editorial Secretary, 77, Wimpole Street, W. Reprints can be obtained at the following prices, if ordered before the publication of the Journal:—

	Pp. 1-4	Pp. 4-8	Pp. 8-16
50 copies	6/-	9/-	12/6
100 copies	7/6	12/-	16/-
200 copies	10/6	16/-	25/-

Special rates are quoted for longer reprints.

We wish to remind members that our columns are always open to them if they will forward to us papers which may be published as original communications, or interesting cases for the "Mirror of Practice." General practitioners, as well as specialists, are constantly meeting with cases of exceptional interest to all of us, and we shall always be pleased to publish them, if they will send them at least a month before publication.

THE

West London Medical Journal.

Published Quarterly under the auspices of the West London Medico-Chirurgical Society.

Original Communications.

THE PROGRESS OF INTESTINAL SURGERY.

By Leonard A. Bidwell, F.R.C.S.

Surgeon to the West London Hospital; Dean of the Post-Graduate College.

Gentlemen,—It is unnecessary for me to assure you how deeply I feel the honour which you have done me by electing me to be your President for this year. I am sincerely grateful to you and I shall endeavour to show my gratitude by attempting to follow the brilliant example set me by my predecessors in the chair. I hope, too, that during my year of office the Society will continue its great prosperity and usefulness, and will again increase its membership. In the management of the affairs of the Society the choice of its Secretaries are of even more importance than that of the President, and the Society is to be congratulated on having two Secretaries in whose hands its present high position is certain to be fully maintained.

Custom, now extending to nearly a quarter of a century, has decreed that the President should deliver an address when taking the chair for the first time, and though I have great diffidence in attempting the task, I dare not commence my year of office by breaking through an old custom. The subject which I have chosen may be considered to be rather too much of a special one, but I hope it may have some interest for physicians as well as for surgeons.

Although the problems of intestinal surgery have been existent from the earliest times, and surgeons have been called upon to deal with gangrene the result of strangulated hernia, and with wounds of the intestine, there was practically no suggestion of any active treatment till two centuries ago. Surgeons were content to consider these cases as beyond the reach of their art, and perhaps rightly decided to trust to Nature. In criticising their actions, we must, however, remember how different were the conditions under which they would have operated: a patient writhing in agony, dirty instruments, untrained assistants, and a firm belief that the peritoneum was a most dangerous membrane, injuries to which were almost always followed by fatal inflammation. Can we wonder that they hesitated and that the approved treatment of a gangrenous bowel was the formation of an artificial anus, and that of a wound in the bowel was the keeping of the abdominal wound open in the hope of the formation of a fæcal fistula? Even in early times, however, some surgeon has shown himself in advance of his age, and has achieved a success astonishing even to himself. Such an one was Ramdohrius, surgeon to the Duke of Brunswick, "who, in the year 1727, cut off a large part of a mortified intestine in a woman who had an incarcerated rupture, which broke of itself; and joining the sound parts of the intestine together, he inserted one into the other, and tied them together loosely with a piece of string, and replacing them in the abdomen, drew them by the string to the mouth of the wound, by which means the divided intestine inflamed and surprisingly united, the woman discharging her fæces afterwards, not through the wound but by the anus as before. The woman afterwards lived in a state of health till in about a year's time she died of pleurisy, and upon opening her the divided intestine appeared to be united with each other." Such is the first recorded case of intestinal anastomosis, but from that time up to 1836 the operation was not performed more than about ten times by various operators. At any rate, the operation was a discredited one at the beginning of the last century, as we find in the writings of a celebrated surgeon, John Bell, the following words: "I have ventured to say, that if there be in all surgery a work of supperogation it is the operation of sewing up a wounded gut. It is a dangerous and puerile conceit."

During the early years of the wonderful nineteenth century, however, the surgery of the intestine was deeply studied by many earnest workers, and one of the greatest advances in the subject was the introduction by Lembert, in 1826, of the method of bringing adjacent serous surfaces in contact by sutures passing through the serous and muscular coats. A little before this time, it was discovered that the plan of leaving the ends of intestinal sutures long and hanging out of the wound was not essential, and it was shown that, if the ends of stitches were cut short the stitches were discharged through the bowel. At about the same time it is interesting to learn that a sort of forerunner of Murphy's button was invented by Denans, "who, in cases of complete division of the intestine introduced into the upper and lower ends of the gut a silver or zinc ring; thrusting it inwards, about two lines from each end, he then brought the ends together over a third ring, of which the two springs retain the external rings. The included ends of intestine mortify and the rings are discharged by stool after they have united the serous surfaces in contact." In dogs the experiment was successful. Many other methods were devised, among which we may note the suturing of the intestine over a tube of calf trachea, or of oiled cardboard, which is the same idea as our modern bobbins.

The first known operation for removal of a cancerous growth combined by an anastomosis was done by Reybard, who in 1833 removed a tumour the size of an orange which was situated in the sigmoid flexure. After removal of about 3 ins. of affected bowel, the two ends of the gut were united by a sort of Furrier's suture, the intestine was replaced and the abdominal wound sewn up. The wound suppurated, but after thirty-eight days the wound was healed and all the fæces passed *per rectum*. The patient lived for ten months and died from recurrence.

These two cases, separated by an interval of more than a century, are the first of their kind and must be considered as marvellous rather than as scientific attainments; in fact, resection of the intestine did not assume the position of a recognised operation until 1875, when it was revived by Langenbach.

It is, then, only during the last thirty years that intestinal surgery has made any real progress, and the progress has been so marvellous, that it seems almost impossible, after the

stagnation of centuries, that so much should have been effected in so short a time. During these thirty years, however, practically all surgery has undergone a profound change, and its limits have been completely altered. The causes of the great changes are various. First we must mention the advent of anæsthetics, without which no tender-hearted man could possibly have performed any of the complex abdominal operations, nor could the patient have endured the prolonged pain and shock. Next we have an improved knowledge of anatomy, of physiology, and of pathology, the result of the use of the microscope, which has entirely altered our ideas of the limits to which we may remove parts of the human frame. Formerly, certain parts of the body were considered inaccessible, and their tissues irreparable; now, the only limit to surgery is the physiological one of avoiding an undue interference with functions.

Of all the discoveries in surgery to which the most advance is due, however, is the work of Lord Lister in demonstrating the causes of suppuration in wounds. Without the knowledge obtained by the antiseptic theory, no advance in intestinal surgery was likely to have been made, since peritonitis was looked upon as a certainty after opening the abdomen. However, it was some considerable time after the introduction and use of antiseptics before any great advance in abdominal surgery took place, as even antiseptics had an injurious effect upon the peritoneum and intestines, and until antiseptics had given place to asepsis, there was not the absolute confidence now felt in opening the abdominal cavity. The bad results of antiseptics were due to injury to the delicate cells of the peritoneum by the chemical used, and later knowledge has shown us that even plain water kills these cells, the only harmless agent being normal saline solution.

Formerly the peritoneum was the bugbear of surgeons; its fatal tendency to inflammation was feared; now it is the surgeon's friend. We now know that firm union occurs within a few hours when peritoneal surfaces are brought together, and if uninjured, the peritoneum has the most marvellous power of absorption, and can get rid of even semi-purulent effusions in a way impossible in any other part of the body.

Next among our causes of progress must be mentioned the improvement in methods of suturing, and the recognition of some important laws in intestinal surgery. Mention has been made of the great advance made by Lembert, but a greater one was made by Halsted, who pointed out that the submucous coat was the most resistant of all the intestinal coverings, and insisted on the inclusion of some fibres of this coat in every stitch. The most important law in suturing relates to the position of the knots of the stitches, and orders that all stitches which penetrate the mucous membrane must have their knots on the mucous surface of the bowel, whilst all stitches whose knots are on the peritoneal surface must not penetrate the mucous coat. It is evident, too, that the facility gained by repeated practice in suturing is also an important factor in success, and such practice must never be neglected; the pioneers of this branch of surgery sacrificed countless dogs in their researches, but operations on the lower animals are no longer necessary, as perfect confidence in suturing can be obtained by practice of the various sutures and methods on the intestines of recently killed bullocks.

Improvement in our instruments must also be referred to, amongst which nothing has aided us so much as the perfection of our methods of hæmostasis, and it would be difficult to imagine the removal of a cancer of bowel without a number of Spencer Wells' forceps.

Other causes which have contributed to our progress are the methods of preventing and treating shock during operations, foremost among which we must mention the injection of saline solution, and the avoidance of lowering the body temperature by using heated operating tables. We must also pay our tribute to the devotion and excellence of our nurses; and finally I think that the advances in after-treatment have had much to do with the improved result. Only twenty years ago, in commenting on an unsuccessful case of intestinal suture, a celebrated French surgeon attributed almost culpable negligence to a colleague because he had commenced feeding within three days of the operation, and stated that only fluids, and these in small quantities, should be allowed for the first ten or twelve days. Now the confidence which we have in our methods of suturing, and the knowledge which we have of the rapidity of the formation of peritoneal adhesions, enable

us to commence feeding our patients within twelve hours of an operation, and thus to minimise the danger of death from exhaustion, and by nourishing the intestines to improve the reparative power of their walls.

In these causes of our progress I purposely have not referred to the various mechanical aids to intestinal suture, since I have grave doubts whether they really have contributed much to the progress. I am convinced that sutures without apparatus are reliable, and so-called aids to anastomosis are liable to make the beginner think that success can be obtained without effort or practice.

So much for the brief *résumé* of some of the causes of our progress. Let us now consider some of the commoner operations on the bowel.

First, with regard to the stomach. In the case of a rupture of an ulcer, the cleansing of the abdomen and the suture of the ulcer offer the only chance of saving life, and if done within a few hours of the occurrence of the rupture the results are very good. It is only in cases which have been allowed to remain many hours that a high mortality occurs. It is interesting to remember that the first operation for a perforating gastric ulcer was performed by a former Cavendish Lecturer, the late Prof. Mikulicz, in 1880, and so rapidly was the operation taken up by the profession, that ten years later Finney, of Baltimore, collected 168 cases of operation, 139 of which had recovered.

The opening of the stomach to remove a foreign body is an operation of great antiquity, Becker, in 1635, successfully removed a knife from the stomach; this, however, remained an isolated case for centuries, and the operation was at that time a hazardous undertaking; it is now a safe procedure, as there is no difficulty in securely closing the incision after the operation. The stomach is also opened in cases of stricture of the œsophagus (gastrotomy), without any danger from peritonitis, the only risk is connected with the debility and cachexy arising from the original disease.

A malignant growth of the pylorus can be excised, and the whole stomach has been successfully removed several times. After pylorectomy cases have been free from recurrence for upwards of eleven years. Such a successful result, however, is rare, and recurrence often occurs within a couple of years of

excision, but even then these two years have been a distinct gain to the patient. But what is the risk? It is slight if only suitable cases be selected, but distinctly high if the growth is adherent to other organs. In these cases, where the growth is unsuitable for removal, a short circuit is made between the stomach and the jejunum, enabling the patient to take food again and to enjoy the remaining months of his life instead of experiencing the horrors of continuous vomiting and of death from starvation. There is, however, a risk in any operation for malignant disease of the stomach, which is quite apart from that connected with the anastomosis, since cancer patients do not seem to pick up, and often die in an asthenic condition some days or weeks after what has apparently been a successful operation.

Quite different is the prognosis in non-malignant diseases of the stomach. Here we may without any misgiving advise an anastomosis between the stomach and the jejunum. In cases of pyloric stenosis, resulting from ulcer, &c., the operation is followed by an almost magical result; any sort of food is taken and enjoyed, and the whole of the patient's life is changed. In chronic gastric ulcer, especially those cases which have relapsed after treatment, the operation of gastro-enterostomy, by giving physiological rest to the organ, offers every hope of curing the ulcer; finally, in cases of chronic gastritis, which baffle the resources of the physician, more especially in those cases associated with hydrochlorhydria and dilatation, complete relief can be given. What is the risk? The mortality in gastro-enterostomy in non-malignant cases has recently been given by Mr. Moynihan at a little over 1 per cent., which practically means a safe operation. True, the result used not to be so good, for apart from the effects of imperfect suturing, there was a frequent occurrence of bilious vomiting, and of the so-called "vicious circle." These ill-effects have been practically prevented by improved methods of operating. The operation of gastro-enterostomy, then, in non-malignant disease may be ranked as one of the most successful in surgery, and so may be proposed by the surgeon without diffidence.

In cases of repeated hæmorrhage from a gastric ulcer, the stomach is opened and its mucous membrane searched to discover the bleeding point, which, if found, is constricted

by a purse string suture round the ulcer, or if the bleeding point is not found, the stomach is put in a state of physiological rest by means of a gastro-enterostomy.

Closely allied to these cases is that of hæmorrhage from a duodenal ulcer, a condition which unfortumately often escapes recognition, as most of the blood is passed *per rectum*. In this case the result of putting the duodenum at rest by a gastro-enterostomy is even more satisfactory than that of the operation for hæmorrhage in gastric ulcer, and a complete cure may be expected. Other operations on the stomach, such as pyloroplasty, Loretta's operation, and gastro-plication have practically fallen into disuse.

Leaving the stomach and duodenum, we will pass on to those conditions of the small intestine which call for surgical treatment. These are wounds, rupture, gangrene, tears during operation, intussussception, fæcal fistulæ, foreign bodies, and new growths. In the case of a penetrating wound of the abdomen or of a suspected subcutaneous rupture of the bowel, the abdomen is immediately opened, a clear cut wound of the bowel is closed with a double row of sutures, or, in the case of a contused wound, a segment of bowel is excised and an end to end anastomosis performed. Either operation is done with certainty that no extravasation will occur, provided that the surgeon has satisfied himself of the healthy condition of the portion of the bowel in which the sutures are placed. The length of the bowel removed does not appear to make any difference. Barker has resected over five and a half feet, and Koeberlé has removed six feet; both cases were successful and had no bad after-effects. In gangrene from strangulation, unless the patient is collapsed, the gangrenous portion and about six inches of healthy bowel on each side of it are removed and an end-to-end anastomosis is done. Here, again, the prospect of success depends upon whether the sutures pass through healthy gut. In collapsed patients the gangrenous loop is simply excised, leaving an artificial anus; after a suitable interval this is closed. Tears of the bowel during an operation do not cause the least anxiety, provided there is no loss of substance and that the margins of the tear are healthy, since these can be simply closed with a double row of sutures. When the walls of the torn gut were included in the inflammatory adhesions, and there

is consequent loss of substance, the loop of intestine is resected and an end-to-end anastomosis performed; except for the additional length of time required it does not add to the risk of the operation. Fæcal fistulæ are now never allowed to persist unless there is an incurable malignant or inflammatory obstruction in the pelvis. In every other case the fistula is closed, and this without involving the patient in any risk beyond that of any operation. When a fæcal fistula cannot be closed by direct sutures, or by resection of the portion of gut, the operation of ileo-sigmoidostomy should be done, in the operation a loop of ileum some nine to twelve inches above the fæcal fistula is sought for, and is attached by lateral anastomosis to the sigmoid flexure, cutting off the fæcal fistula and the colon: in order to ensure that all contents pass through the lateral anastomosis, the small intestine is divided between the anastomosis and the fistula and its ends closed up. This is called occlusion of the intestine.

Foreign bodies can with safety be removed from the intestines, through an incision on the convex border; this should be of sufficient length, since it is better to have plenty of room for the removal of the foreign body, than to bruise the edges of the incision by dragging it through too small an opening. There is no difficulty about closing the wound in the intestine.

New growths of the intestine are a little more troublesome, since we have not only to contend against the effects of the intestinal obstruction, but we often have also to deal with secondary infection of the peritoneum or of adjacent coils of intestine. The long-standing obstruction which nearly always exists has two bad effects. First, it causes a considerable hypertrophy of the bowel above the growth, and so makes the pieces of bowel above and below the growth of unequal size; and secondly, it produces a certain amount of chronic inflammatory changes in the bowel above the obstruction, which will interfere with sound union. If these two conditions are well marked at the operation it is best to content one's self with removing the tumour of the bowel together with about two inches of healthy bowel on each side, and to leave an artificial anus at the part, this will allow the hypertrophy and inflammation of the upper portion to subside before doing an end-to-end anastomosis, which latter operation can be subsequently

undertaken without any misgiving as to success. In cases of cancer of the bowel in which the before-mentioned changes are not well marked, the loop of bowel containing the tumour is excised, and the two ends of the gut united by end-to-end anastomosis at the same sitting.

Following down the intestinal tract we now come to the cæcum, a portion which has the greatest interest to both physician and surgeon on account of its appendix. The surgery of the appendix vermiformis has been so fully described in recent literature that I shall very briefly discuss it. Removal of the appendix in the interval between attacks of appendicitis was first recommended in 1887 by another of our Cavendish Lecturers, Sir Frederick Treves. It would be difficult to estimate the number of times it has been performed since its introduction, probably many hundred thousand times. It is about as safe as any operation in surgery, and has a very slight death-rate. My own statistics show a mortality of considerably under 1 per cent. It is now usually urged upon the patient after one severe attack of appendicitis, or after two or three slight attacks. At the operation the stump must be invaginated and buried inside the cæcum, since attacks resembling appendicitis have occurred after removal of the part, when a stump has been left.

The great point in acute perforation is to avoid delay, and the results of operation and removal of the appendix are not bad if the operation be done within twelve hours of the onset; the prognosis gets worse and worse according to the time which elapses between the onset of the disease and the operation. In the less severe forms of appendicitis the formation of pus demands that an immediate operation should be performed, even though we know that pus in the neighbourhood of the appendix may be absorbed, since there is always a risk of the rupture of a localised abscess into the general peritoneal cavity, and such a catastrophe is the most serious of all diseases of the appendix.

Time will not allow of any further reference to this interesting subject, but we must turn to the large intestine. Here we have somewhat different conditions to deal with, owing to the somewhat solid character of the intestinal contents and to the absence of a complete peritoneal covering in the greater part of the colon. The conditions which we are called upon

to treat in the large intestine are: (1) Ulcerative colitis; (2) new growths; (3) artificial anus; (4) volvulus and distended sigmoid, and (5) chronic constipation.

In ulcerative colitis a right inguinal colotomy may be performed in order to give physiological rest to the inflamed mucous membrane, and also to enable one to irrigate the bowel with antiseptic and astringent lotions. Recently an important addition to the means of treatment has been made by my colleague, Mr. Keetley, who was the originator of the operation of appendicostomy, in which operation the tip of the vermiform appendix is attached to the skin and opened, and by means of a catheter passed down the appendix the colon can be thoroughly washed out. Another operation which I advised for this condition is that of ileo-sigmoidostomy, by means of which the large intestine is completely shut off. This is a perfectly safe operation, and in cases where the ulceration does not extend into the sigmoid and rectum it will be quite effectual.

The most common indication for surgical interference in the large intestine is malignant disease. The earlier the condition is recognised the better the hope of successful removal, and as the more solid are the contents of the bowel in the lower part of the intestinel tract, it follows that symptoms of obstruction will arise at the earlier date the lower the growth is situated, and therefore the lower the portion of the bowel that is implicated the greater the hope of a successful result. The very successful work which has been done by my colleague, Mr. Edwards, shows that the early excision of the rectum for carcinoma is followed by a permanent cure. In the cæcum, on the other hand, obstructive symptoms are so long delayed that the growth may have formed extensive adhesions and deposits before it is recognised. In cases where there are no secondary deposits the growth of the bowel, together with the enlarged mesenteric glands, is removed, and either an immediate anastomosis is made between the two ends, or after removal of the growth a temporary artificial anus is made. The treatment of an artificial anus does not present any difficulty so long as there are a few inches of sigmoid below it, as it can either be cut off by the operation of ileo-sigmoidostomy, or if the bowel is not completely divided and has not suffered any considerable loss of

substance, the artificial anus can be closed by freshening the edges, and uniting them with several layers of sutures.

Volvulus and distended sigmoid can also be relieved by the operation of ileo-sigmoidostomy; mere untwisting of the volvulus is almost sure to be followed by recurrence, whereas, the cure affected by short circuiting is permanent. We must, however, bear in mind that intestinal suturing done during acute distension is a much more serious undertaking than it is at other times, since it is only when dealing with healthy intestines that we can be at all certain of our results. Lastly, we come to the treatment of chronic constipation, and here, again, surgery is willing to step in where medicine has failed to give relief. In such cases the operations which afford a hope of cure are those of ileo-sigmoidostomy or of appendicostomy, but even in the really obstinate cases these are not always successful.

In the above remarks, I have briefly described some of the developments of intestinal surgery. Truly it is a great subject and one which has developed more during the last few years than any other branch of our art, and considering the amount of the work being done in this direction, we may hope that the improvements which will be made in the next decade will be as great as those made during the present one.

This Society has reason to be proud of the part which it has taken in the development of intestinal surgery; I have already referred to the work of two of our Cavendish Lecturers, both of whose addresses added considerably to our knowledge of the subject; in addition to this, several of our members have read valuable papers before the Society, and their work has contributed in no slight degree to the wonderful progress of this branch of surgery.

APPENDICITIS IN CHILDHOOD.

By W. McAdam Eccles, M.S.Lond., F.R.C.S.Eng.

Assistant Surgeon, St. Bartholomew's Hospital; late Senior Assistant Surgeon, West London Hospital, and City of London Truss Society, &c.

Inflammation of the vermiform appendix is always liable to be a grave affection in childhood, and its diagnosis and treatment therefore a matter of great importance.

Appendicitis is said to be a disease of early life. This statement is in the main a true one, but the term "early" must not be considered to mean any age before puberty. Between fifteen and twenty-five years of age is the period of life for the special incidence of the lesion, and the time when it appears to have the highest death-rate. Under five years of age it may be said to be decidedly rare, but between five and ten a fair proportion of cases occur. Out of 965 instances recently recorded of definite appendicitis, 8·3 per cent. were below the age of ten. Probably appendix inflammation is never present before birth, though other causes of peritonitis may be at work. At birth the meconium is usually sterile, but within a few days bacteria can be demonstrated in the alvine discharges, and from this period onwards appendicitis may appear. An infant of seven weeks has succumbed to general septic peritonitis induced by the perforation of an appendix containing several hard fæcal concretions.

It is well known that the appendix exhibits a considerable amount of lymphoid tissue in young life; in fact, from its earliest existence up to almost late middle life this special tissue may be seen, though after thirty it tends to disappear. It is also an undoubted fact that lymphoid tissue in any region of the body is prone in childhood to be the site of inflammatory processes. While, therefore, this peculiarity and proclivity may explain the incidence of the lesion from five years of age and upwards to puberty, it leaves unaccounted for why the inflammation of the "abdominal tonsil" is uncommon before five, or even seven years, especially seeing that inflammation of the "palatine tonsil," or tonsilitis, is frequent. It may be that while the fauces cannot at any time be protected from infection, the vermiform appendix is

less exposed to injury, and until the child becomes more independent, and ventures to eat material which is not suited to the alimentary canal, one of the factors in the etiology of appendicitis is wanting.

There can be but little doubt that indigestion, decomposition of intestinal contents, flatulency, and the multiplication of bacteria in the bowel are fertile predisposing causes of appendicitis. Until such conditions are associated with some exciting cause, as a strain, a foreign body within the tube, intestinal worms, &c., inflammation of the appendix does not evidence itself. Exciting causes may be absent in the first few years of life, but they tend to be increasingly prevalent up to about twenty years of age.

Tuberculous infection of the appendix may occur in childhood, and may be the starting point of tuberculous peritonitis; and it is also possible for actinomycosis to be the foundation of the inflammation even at so early an age.

The incidence of an acute attack of appendicitis in childhood is very similar to that in an adult. Not infrequently the history elicited is that the child, who has been apparently in its usual health, is taken, often in the early morning—after perhaps indiscretions at a party the evening before—with vomiting and severe pain in the abdomen. Too frequently this is looked upon merely as biliousness with a stomach-ache, and treated by a dose of castor oil. If such cases were seen by the family practitioner, in many instances there would be found to be a rigidity of the lower part of the right rectus, and a sense of distinct resistance in this region. The child not infrequently lies with its right thigh flexed, and avoids movement in bed, and declines to lie on its right side. In other cases there is marked disturbance with the bladder functions, so much so in some that it amounts to even mild strangury, the desire to micturate being constant, and accompanied by much pain. This usually indicates that the appendix is lying over the brim of the pelvis, and that the peritoneum covering the posterior surface of the bladder is involved in the inflammation. Occasionally tenesmus is present.

If a tumour forms in the right iliac fossa the diagnosis becomes clear.

There are, however, three conditions which may very

closely simulate appendicitis in children. The first is intussusception. The earlier the age the more likely is the case to be one of invagination rather than appendicitis. A blood-stained mucous discharge is most characteristic of intussusception. Constipation is the rule in appendicitis, though in children diarrhœa may not infrequently take the place of constipation, yet even when it is present there is no blood in the stools. The tumour to be felt in intussusception is generally discovered away from the iliac fossa, and most commonly about the umbilicus and rather to the left of it. The swelling found in advancing appendicitis is nearly always confined to the right iliac fossa. In intussusception a raised temperature is absent, the body heat tending rather to fall than to rise. In appendix inflammation there is nearly always some fever.

The second disease liable to be mistaken for appendicitis in children is gastro-enteritis with colic. In gastro-enteritis diarrhœa is the rule; in appendicitis it is the exception. The pain of colic is often smart, but it is spread over a much shorter time than that of appendicitis, in which lesion it is apt to be prolonged and continuous. A differential blood-count may be of service. The third condition liable to be confused is enteric fever. Here there may be pain in the right iliac fossa, there is fever, and not infrequently some vomiting. The absence of any "lump," and the marked gurgling in the region of the cæcum, together with other suggestive symptoms and signs of enteric, should make the diagnosis clear.

The progress of appendicitis in childhood is often marked by insidiousness, and there may be distinct but deceptive signs of improvement. Such elusive conditions must be carefully excluded, and must in no way lead to errors in diagnosis or a want of proper treatment. It is because of the failure to perceive the presence of appendicitis, and to grasp the seriousness of the condition, that so many cases pass into the state of general peritonitis, when treatment is well-nigh hopeless.

I am convinced that if the case is diagnosed quite early in an acute attack, the safest treatment is to at once explore and remove the appendix, and this more so in childhood than in adults. When pus is present, its evacuation is imperative.

With regard to treatment, when acute symptoms have

passed off, there can be no doubt that the removal of the appendix in the quiescent stage is not only safe, but relieves the little sufferer from the probability of another attack.

I have found that children stand these operations very well, and provided that the incision is so placed as to go through the rectus sheath, there is little or no danger of any subsequent traumatic hernia.

Reports of Proceedings.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY—ORDINARY MEETING.—Friday, July 7, 1905. 5 p.m.

T. GUNTON ALDERTON, Esq., in the chair.

The minutes of the last meeting were read and approved.

Guy H. Coltart, M.B.Lond., M.R.C.S., L.R.C.P., of 714, Fulham Road, S.W., was unanimously elected as a member of the Society.

Four gentlemen were nominated as candidates.

THE ANNUAL GENERAL MEETING.—Friday, July 7, 1905. 5.15 p.m.

C. M. TUKE, Esq., President, in the chair.

The minutes of the last Annual Meeting were read and adopted.

The Annual Report and Balance Sheet were read and adopted.

The Officers and Members of Council for the ensuing year were balloted for. The members who were severally recommended by the Council were unanimously elected.

Mr. F. LAWRANCE proposed a hearty vote of thanks to the President, who briefly returned thanks.

Dr. S. D. CLIPPINGDALE proposed a vote of thanks to the Officers of the Society, to which Dr. ELLIOT, the Senior Secretary, responded.

The Mirror of Practice.

A CASE OF INFECTIVE CYCLITIS FOLLOWING AN INJURY TO THE RIGHT EYE, RECEIVED NINETEEN YEARS PREVIOUSLY.

By Percy Dunn, F.R.C.S.
Ophthalmic Surgeon to the West London Hospital.

The following case is one of interest and worthy of being placed on record:—

N. S., A pale-faced married woman, giving her age as 32, came to my out-patient room on March 30, 1905, complaining of loss of vision in the left eye. She gave the following history. When 13 years of age, nineteen years ago, she was knocked down in the roadway by a pair of horses, and sustained a severe wound over the right eye. The treatment which she received was that provided for her at home, that is to say, she was not taken to a hospital, and she made a good recovery. But for eighteen months subsequently she was troubled with diplopia. Then the double vision passed away, and about this time an attack of inflammation occurred in the left eye, for which she was advised to use a shade; as soon as the left eye had been covered she found that the fellow eye was blind. So far as the inflammatory attack in the left eye is concerned all that she remembers is that it quickly subsided under treatment, but she cannot remember whether or not she was taken to hospital, or of what the treatment consisted, nor can she remember receiving any treatment for the right eye at any time. The right eye has off and on always given her trouble, at times it was liable to be very painful, although she does not remember that it ever appeared to be inflamed. Three years ago it was first noticed to be wasted, and five weeks before she came to see me the eye had begun to become red, very tender to the touch, and persistently painful. About ten days subsequently to the onset of these symptoms she noticed that the vision began to fail in the fellow eye. In addition to the failure of vision the left eye became inflamed, and marked lachrymation and photophobia supervened. Two days before coming to the hospital she could not see across a room, or the time by a clock without going close up to it. Everything appeared as in a dense fog. She was just able to see to do her cooking, which was her occupation, but dared not trust herself in the streets without the assistance of a guide.

On examination the right eye was found to be atrophied,

or in a condition, as test-books would so fancifully and absurdly describe it, of "Phthisis bulbi"; it was deeply injected, very painful on palpation, and T.—3. The cornea was too opaque to render it possible to determine the condition of the iris or the intraocular structures.

The left globe, somewhat prominent, the result of myopia, showed slight injection; the pupil, regular though sluggish, reacted to light; there was no trace of plastic exudation either upon the iris or the anterior capsule of the lens; nor of punctate deposits upon Descemet's membrane, but an ophthalmoscopic examination was impossible owing to the photophobia. The patient was advised to come into the hospital at once for enucleation of the right eye. In three days' time she presented herself for admission, and the eye was removed on April 3, 1905. The recovery of vision in the left eye was rapid. Three days after the operation the sight began to improve, and on the seventh day she was able to read a newspaper, which had not been possible during the past five weeks owing to the failure of vision. She was discharged from the hospital on April 10, 1905. The vision in the left eye was retested on August 28, and the following result was obtained, viz: $\frac{6}{nil} - 5 = \frac{6}{12}$ nearly. J. 1 at 6″, fluently, without a lens.

Remarks by Mr. Percy Dunn.—The term infective cyclitis made use of in the description of this case is one which I have for some time been advocating as being more in accord with modern pathology than that which is commonly known as "sympathetic ophthalmia." And in the discussion of this subject I must refer the readers of the JOURNAL to a lecture which I delivered in the Post-Graduate College (published in the *Lancet*, August, 1904), in which the reasons for that innovation are explained at length. Moreover, in this lecture it is pointed out that the so-called "sympathetic irritation," which by so many observers is held to be a distinct disease from so-called "sympathetic ophthalmia," cannot be otherwise than merely a less virulent form of the infective malady. In the case above narrated the disease was of modified form as proved by the fact that there was no plastic iritis, and yet, unless the source of infection had been removed, there is no reason for doubting that the patient would have become totally and permanently blind. But, apart from the precise pathology, this case presents several further points of interest. First, the patient is extremely indefinite as to any injury which the right eye received at the time of the accident. The only symptom of which she has recollection is the diplopia, which persisted for eighteen months, but her testimony in this regard cannot be deemed to be altogether trustworthy, inas-

much as had the eye not been severely injured, how otherwise could the leucomatous cornea be accounted for, and the atrophy of the globe which was present? Nevertheless, the right eye retained some vision after the accident, as is shown by the diplopia; on the other hand, as soon as the double vision ceased to be noticeable, the eye had undoubtedly become blind. Another point is the long period—nineteen years—which elapsed before the development of the infective symptoms. This goes to prove that the primary infection must have been of a mild, virulent type—an hypothesis which receives ample confirmation from the fact that the symptoms of infection produced in the fellow eye were only of a modified form. But within the limits of these remarks it is impossible to discuss with any fulness the subject of infective cyclitis. Nevertheless, the disease is one abounding in interest, replete with problems which have still to be determined, and environed with such difficulties of investigation that it is likely to afford for a long time to come ophthalmic surgeons a subject for interesting speculation.

ON THE VALUE OF EXAMINATION OF THE BLOOD DURING TYPHOID FEVER.

By JOHN ATKINS, M.B., F.R.C.S.

THE value of a leucocyte blood-count as an aid in the *diagnosis* of typhoid fever is well recognised. The following case illustrates the aid which an examination of the blood may give *during the course* of the disease, more especially with reference to the complications.

A well-developed man, aged 24, who was suffering from a severe attack of typhoid fever, suddenly developed symptoms of collapse on the first day of the third week of the illness. The previous day he had been in a dull, listless condition, slightly delirious during the night, with trembling of the arms and twitching of the fingers, his temperature remaining about 102° F. with a pulse of 112, small and slightly "running" in character. At three o'clock in the afternoon he became suddenly pale, quite unconscious and large beads of perspiration stood out on his forehead. The face soon became of a dusky hue, the temperature fell rapidly to 99° F., and the pulse, which was almost imperceptible at the wrist, reached a rate of 128. A subcutaneous injection of strychnine was given at once. The nature of the collapse was then considered. The conditions which came at once to the mind were hæmorrhage, perforation and acute heart failure.

Hæmorrhage was considered first. The period of the

disease (the fifteenth day) and the rapid fall in temperature were in favour of this. No blood, however, was passed *per rectum*, and the specific gravity of the blood was found to be 1052. Thus it was extremely unlikely that any hæmorrhage sufficiently severe to produce the condition present had occurred, as such would have led to a distinct fall in the specific gravity of the blood.

The question of perforation then arose. In favour of this were the sudden and severe onset at the beginning of the third week of a grave attack of typhoid fever, in which meteorism had been a prominent feature; the rapid fall of temperature, the sweating, the rapidity of the pulse, rigidity and distension of the abdomen, and absence of liver dulness. A physical examination was not, however, of great value, for the patient being unconscious no indication of pain on pressure could be obtained and the liver dulness had been absent twenty-four hours previously owing to tympanites. There were no abnormal physical signs in the lungs.

A blood-count was then made and the leucocytes found to be just about 7,000 per cubic millimetre. This strongly contradicted perforation, for with this complication there is in most cases a marked leucocytosis within half an hour of its onset. In those in which perforation has occurred and no leucocytosis has been found the patient has been in a marked debilitated condition (such as might result from a prolonged illness) and there is no leucocytal reaction. In this case, however, the patient was a remarkably well-developed man, aged 24, who had been ill but two weeks, and in whom a leucocytosis would have been justly expected in case of perforation.

The absence of any marked increase in the number of leucocytes present also confirmed the view that hæmorrhage had not occurred, as with this complication there is generally a considerable increase in the number for some time subsequently.

By the time the blood-count was finished a physician of wide experience saw the patient. From the examination he made he considered that perforation was the most likely cause of the collapse, but confessed that the leucocyte count, if trustworthy, strongly indicated otherwise. A second count was made in his presence and again the leucocytes were found to number about 7,000 per cubic millimetre. He then said that under the circumstances the best advice he could give was that if no leucocytosis occurred the case had better be treated as one of heart failure, whereas if any marked leucocytosis developed laparotomy should be performed.

Accordingly, a leucocyte count was made every hour for

the next fifteen hours, that is, till six the following morning, and in no one instance did the leucocytes number more than 9,000 per cubic millimetre. In the meantime, the heart condition was met with repeated injections of strychnine. No laparotomy was therefore done, and in about twenty-four hours the patient rallied and from that time onward made an uninterrupted recovery. He was seen several months subsequently and was quite well and working regularly.

The chief points illustrated by the case are :—

(1) By determining the specific gravity of the blood hæmorrhage was negatived. The practical value of this was shown in the subsequent treatment, as cardiac stimulants could be employed at once without any fear of increasing hæmorrhage.

(2) The leucocyte count, made at regular intervals over a considerable period of time, prevented a laparotomy from being performed. As the patient was evidently suffering from acute heart failure this abstention from operation probably saved his life.

INTRACTABLE URETHRAL STRICTURE.

By JOHN PARDOE, M.B., F.R.C.S.

Senior Assistant Surgeon to St. Peter's Hospital.

J. R., aged 34, has suffered from urethral stricture for five years. He first noticed diminution of the size of the stream of urine six months after his first and only attack of gonorrhœa, which was not excessively severe. Within a few months the stream had diminished to a dribble and several attacks of partial retention occurred. He was admitted to a provincial hospital and an attempt was made to dilate the stricture, but this was found to be impossible, so an internal urethrotomy was done, and full-sized steel bougies were passed readily. Within a few months of this operation the stricture had again contracted to such a degree that marked interference with micturition was present. A perineal section was done and the bladder was drained for some weeks. On discharge from the hospital full-sized steel instruments could be passed, and the patient was instructed to pass a bougie for himself. This he did carefully, but contraction again took place, although the interval was of eighteen months' duration between this operation and difficult urination again commencing.

He came to the out-patient department at St. Peter's Hospital a year ago, when he was able only to pass a thread-like stream of urine. The urine was of clear appearance, of good specific gravity, and contained neither pus nor albumen. Examination with the urethroscope showed a dense white

mass of scar tissue in the bulb, just in front of the compressor urethræ, pierced by the opening of the urethra above, whilst on the floor was the aperture of a false passage. A filiform bougie only could be passed into the bladder. The gentlest attempt at dilatation caused free bleeding and was followed by an attack of complete retention which required relief by a filiform catheter. The patient was therefore admitted, and internal urethrotomy performed. For some months after this the stream remained of good size, but the patient being unable to attend the hospital to have instrumentation, relapse again took place. Three months ago the stream had returned to its old condition, so the patient was readmitted, and I again divided the stricture with the largest knife of a Maissoneuve urethrotome. After cutting with this knife a No. 12 steel bougie (English scale) was the largest instrument which would pass without undue force, although in an ordinary case a No. 16 passes with ease after section of a stricture with this size of knife.

This, then, is a case of relapsing stricture of the worst type. Perineal urethrotomy, with bladder drainage to give the wound of the urethra rest, repeated internal urethrotomy, and careful attempts at dilatation, have all failed to effect a cure. Two methods of treatment only remain. The first of these is complete excision of the stricture followed by end-to-end suture of the healthy urethra, or substitution of some graft to fill the gap. End-to-end suture can only be carried out when the scar tissue is not of great length, and in this patient the stricture is at least 1½ to 2 inches long, so this plan is inadmissible. Grafting of mucous membrane from other animals has been suggested and attempted, but not with very satisfactory results. I have not tried this plan, and prefer the second method, which I have adopted in this case. It is as follows: after an internal urethrotomy the fullest sized bougie is used which can be passed without undue violence (in this case No. 12 English), and, if possible, this instrument is passed regularly once or twice a week for several months. In the majority of cases the largest bougie passed under the anæsthetic after the urethrotomy cannot be passed two days later, but about two sizes smaller can be passed, and this instrument is then used.

The object of this frequent passage of a very moderate-sized instrument, say No. 10 English, is to keep the stricture at exactly that calibre for a long period. It then appears to settle into a rigid condition and the tendency to rapid contraction ceases.

After several months of such treatment the patient is allowed to come once a fortnight for his instrument, and if

it passes just as easily as before he then comes once a month, and so on, at increasingly longer intervals.

The bougie of this size passes with complete ease, so smoothly, indeed, that one is tempted to try a larger size the next time. But let no one be deluded into attempting this, for the essence of this treatment is to obtain a rigid tube of set calibre. Perhaps the surgeon is successful in passing one size larger with a good deal of difficulty followed by a little blood. He will repent on the occasion of the patient's next visit, for his original size will not now pass, nor perhaps will a size smaller do so. He has split the stricture and has only succeeded in adding more scar tissue to that present already. After six months or so of this treatment urethroscopic examination shows the rigid opening of the urethra surrounded by a ring of dull white scar tissue, and this is the condition to be aimed at.

A complete cure is perhaps hardly obtainable by this method, for although some patients can go for months without any appreciable contraction taking place, there are others who find that it is advisable for them to come once in two or three months to insure the maintenance of the calibre obtained.

A CASE OF HÆMATURIA WITH MISLEADING SYMPTOMS.

By JOHN PARDOE, M.B., F.R.C.S.

MRS. G., aged 32, had noticed blood in the urine in small quantities for some months. This was accompanied by a dull aching pain in the left loin extending thence to the front of the abdomen and referred to the left inguinal region. The bleeding was intermittent, several attacks during one month being followed by one or two months' absence of blood. Severe exertion was frequently followed by an attack of bleeding, which ceased when the patient rested on her back for some days.

After a few months the bleeding became more free and a considerable number of clots were passed of irregular shape, whilst the lumbar aching increased, and a "lump in the side" was noticed.

When I first saw her the patient was considerably blanched by repeated bleedings, but was a well-nourished woman, her appearance corresponding with her age. The left hypochondrium was occupied by a large hard tumour, very tender to the touch, movable bimanually, with a hand on the abdomen and one beneath the loin, moving with respiration, and

reaching in front almost to the umbilicus internally and to the crest of the ilium below. There was no suprapubic fulness or tenderness, and no induration or pain to be elicited by a vaginal examination of the bladder wall. There was no undue frequency or pain on micturition. At first sight, then, the case appeared to be one of growth affecting the left kidney, Rest in bed for forty-eight hours completely cleared up the blood, and cystoscopy became possible. The bladder held a distension of ℥x. easily and without pain, and cystoscopy presented no difficulty.

Attached to the bladder wall by a short pedicle was a villous papilloma about the size of a small walnut. The pedicle sprang from the wall about half an inch from and to the outer side of the orifice of the left ureter, and hanging down towards the floor of the bladder dragged upon and compressed the ureteric meatus. No efflux of urine could be seen from the left side, but there was a free discharge of limpid urine from the right kidney.

I opened the bladder suprapubically and removed the growth, cutting out its base with cutting forceps. Immediately after the removal of the growth there was a free discharge of clear urine from that side and the lumbar tumour completely disappeared. It had been simply a tense hydronephrosis due to pressure and dragging of the papilloma upon the ureteric meatus.

The growth appeared both to the naked eye and in microscopic section to be a perfectly innocent villous papilloma. I closed the bladder completely and drained by a Pezzer's catheter *per urethram*. The wound healed well by first intention.

The after history of this case is as instructive as it is sad.

Three months after the operation described above this patient returned to me saying that she had been in perfect health until the day previous, when she noticed a tinge of blood in the urine.

The cystoscope revealed a growth on the site of the previous one about the size of a small cherry, but very little pedunculated and almost smooth on the surface.

I removed this again by a suprapubic incision, cutting well into the muscle of the bladder wall and applying the cautery freely to the wound. There was no feeling of induration of the bladder wall on examining with one finger in the bladder and the other in the vagina.

Microscopically examined, the growth looked extremely suspicious. Columns of epithelial cells had pushed their way into the bladder muscle, many of them large and irregular, with irregular nuclei. Mr. G. Cheatle, who kindly examined

the specimen for me, considered that definite heterotype mitosis was present. The only course to pursue was therefore to do a partial resection of the bladder, removing the lower end of the left ureter and implanting it afresh. This advice I gave to the patient; but, disappointed by having undergone two operations, she refused a third and more serious one. The bladder again healed by first intention, and one month after operation, just prior to her departure from the hospital, the cystoscope showed no sign of recurrence. She became pregnant two months later and was delivered at term. During the last months of her pregnancy hæmorrhage from the bladder was constant and distressing. I saw her two weeks ago, and her bladder is now filled by a stony-hard mass of growth, feeling like a fœtal head on bimanual examination. She is much wasted, there is great œdema of the lower limbs, and marked ascites is present. The hæmorrhage has ceased to be severe, but is constant, and distressing frequency of micturition renders her life almost intolerable.

This case presents two features of great interest. Firstly, without cystoscopic examination this woman's left kidney would almost certainly have been explored, the conjunction of a large hard tumour in the left loin, with lumbar pain, and hæmorrhage pointing so strongly to renal growth. Secondly, it exemplifies the extreme difficulty of forming any conclusion as to the innocence or malignancy of vesical growths, and lends strong support to the contention that wherever possible the whole thickness of bladder wall (a partial resection of bladder, in fact) should be removed along with the growth, even though clinically it appears to be benign in character.

VARICOSE ULCERS TREATED BY SCOTT SCHLEY'S METHOD. —Marchetti (*Gazz. degli Osped. e delle Clin.*, May 21) recapitulates the various more important methods of treatment for ulcers and superficial wounds, and points out that Scott Schley's method is the most logical and the most effectual for out-patient practice. It consists in covering the surface thickly with a layer of finely powdered boracic acid, and placing over it a sheet of gutta-percha tissue extending for 3 to 5 cm. beyond the margin of the raw area. This is fixed on with bands of strapping, and a gauze dressing is applied over it with a bandage. This application is only changed every five days; frequently it may be left for a week. Marchetti has tried this plan in twenty-five cases. Every case was first submitted to a thorough disinfection of the wound and the surrounding parts by washing it with hot water and soap, shaving, and cleansing it with ether.

Hospital Notes.

By A. Elliot, M.D.

Case of Arterio-Sclerosis and Chronic Interstitial Nephritis in a Boy, aged 17.

A. E. B., aged 17, was admitted to the West London Hospital, under Dr. Seymour Taylor, on June 29, 1905. The history of the case was as follows:—

Family History.—The father and mother were healthy-looking people in later middle life, and had never had any serious illness, nor had either of them suffered from any symptoms which might have been renal in origin. Both of them, however, were found to possess arteries which were much thickened for their ages (50-55). Two brothers of this patient had died at about the same age (17-20). One of them had died after a short illness of nephritis, following scarlatina. The other one, after wasting for some time, had suddenly become acutely ill, and died in coma. In this case the medical man who attended told the parent that the case was one of Bright's disease, and there was no history of scarlatina. Both these boys early became deaf.

History of the Present Illness.—The illness was of about a month or five weeks' duration previous to admission. The boy had been deaf from birth, and intellectually had always been somewhat torpid. The relatives had noticed during the period mentioned that the boy had been wasting, his intellectual faculties were duller than usual, and he had become lethargic and disinclined for any exertion. His skin had acquired a peculiar earthen tint. His appetite had been very poor, and his bowels obstinately constipated. He had occasionally vomited, the act of vomiting, however, being always definitely related to the taking of food. He did not complain of any headache. He was first seen in the out-patient department, and at that time (some two weeks' previously to admission) there was only a faint trace of albumen in the urine. As he made no improvement and the amount of albumen in the urine was increasing he was admitted.

State on Admission.—The boy was small and ill developed, and showed signs of having recently lost flesh; his weight was only 5 st. 3 lb. The skin was harsh and dry, and of a peculiar yellowish-white earthen hue. The colour did not amount to jaundice, and there was no icteric tinge of the conjunctiva, nor was there any excess of pigment in the nipples, axillæ, or mucous membrane of the mouth. The skin was covered over the chest and limbs with an eruption, having the characters of a "folliculitis"; no information could

be obtained as to how long this rash had been present. The temperature was 98°.

Chest.—The apex beat could be seen and felt in the fourth and fifth left intercostal spaces half an inch outside the nipple line. It was heaving and forcible in character, but no thrill could be felt. The superficial cardiac dulness began above at the third left intercostal space and extended to the left sternal edge. The left border of the cardiac dulness was one inch outside the nipple line. On auscultation the sounds were clear, no murmurs were heard, nor was there any accentuation of the second sound, either over the aortic or over the pulmonary cartilage.

Lungs.—Normal.

Peripheral Vessels.—The radial arteries were much thickened and could be rolled under the finger like those of an old man. The pulse tension was moderately raised, and the pulse rate was 88 per minute. The other superficial arteries, notably the temporal, were markedly thickened and tortuous.

Abdomen.—There was a certain amount of general tenderness of the abdominal wall, especially over the liver, any attempts at palpation causing the patient to hold the abdominal wall rigid. The respiratory movements, however, were normal. The liver dulness was normal, and neither liver, spleen, kidneys, nor anything else abnormal could be felt.

Urine.—The urine was pale, of specific gravity 1012, reaction acid. Albumen was present in moderate quantity, after standing twenty-four hours = about $\frac{1}{6}$. The centrifugalised deposit showed moderate numbers of casts, mostly degenerated epithelial and blood casts. No estimations of the excretion of urea were undertaken.

Nervous System.—All the reflexes were normal, and there were no paralysis or anæsthesia anywhere. The patient was very deaf and the cerebration was very slow. The pupils were equal and reacted normally, both to light and accommodation.

Ophthalmoscopic Examination.—There was no neuritis in either fundus, but the discs were pale and suggestive of a degree of post-neuritic atrophy. Along some of the vessels some fine lines of whitish exudate could be seen. The bowels were obstinately constipated, but the stools were normal. The gums were spongy and bled readily. There were no enlarged glands anywhere.

Progress.—Whilst in hospital the patient went steadily downhill. He took very little nourishment, and was frequently sick, but always after food, the vomit consisting of undigested food. He lost flesh, the weight one week after admission being 5 st. 1 lb. (2 lbs. less than on admission).

The quantity of urine passed was small—15, 16, 12, 17, 22, 12 oz. per diem, always pale and the specific gravity always low, 1010-1012. Albumen was constantly present to the amount of about $\frac{1}{8}$, rising in the last few days of life to $\frac{1}{4}$, but this may be accounted for by the fact that blood in small quantity was then present. The casts increased in quantity, and were of the epithelial type, mostly in various stages of degeneration. During the last few days a few blood casts were seen. No urea estimations were undertaken.

The patient did not complain of headache, and no twitchings or convulsions were observed. There was never any rise of temperature, and the pulse rate continued at about 64-88. The condition of the mouth became worse, the gums constantly oozing and hæmorrhage taking place from the nostrils. The day before death the lymphatic glands of the neck became enlarged and tender, and the periglandular tissue was swollen and œdematous. There was no general anasarca or œdema anywhere else. The patient gradually sank into a more and more torpid condition. On the day of his death he was in a state of low delirium, and for a few hours' before death he was comatose with widely dilated, inactive pupils and slow gasping respirations. Death took place on the evening of July 8, nine days after his admission to hospital.

Post Mortem.—The *post-mortem* examination was performed by Dr. Candler. The heart was enlarged, most of the enlargement being due to hypertrophy of the left ventricle. All the valves were healthy, and there was no atheroma at the root of the aorta. The myocardium was apparently healthy, but the coronary arteries were atheromatous. The kidneys were contracted, weighing only $2\frac{1}{2}$ oz. each. They were pale and the capsule stripped with great difficulty, leaving a well-marked granular surface. On section the kidneys cut with a resistant feeling. The surface of the section was pale, the cortex was reduced to a layer about $\frac{1}{8}$ inch thick, and the thickened vessels could be seen standing out. The whole kidney substance was very firm and hard. The other organs were healthy.

Pathological Histology.—The sections of the kidney showed an enormous increase of the fibrous tissue stroma. The glomeruli near the cortical surface had completely disappeared, giving place to hyaline masses. Deeper in the kidney substance the glomeruli were degenerated and surrounded by thickened capsules. The tubules were all compressed by the fibrous tissue, the cells were broken apart, and were of a more cubical shape than normal. In many cases the tubules contained only degenerated remains of cells whose nuclei did not stain at all. All the vessels in the kidney substance were

thickened. Sections of the coronary arteries showed marked proliferation of the inner coat, the sections tending to assume the signet ring shape. There was no calcification in the inner or middle coats.

The features which make this case so interesting are the family history and the early onset of the affection. That chronic interstitial nephritis is a family affection is a well-established fact, but it is rare to find three children in a family dying at the same early age (although in this case one of the cases was definitely traced to scarlatina), the parents also presenting an arterio-sclerosis which was, so to speak, in advance of their years. Then, again, the rapid progress of the disease from the commencement of symptoms, no premonitory signs having ever been noticed, is an interesting feature.

(The notes of this case were taken and the histological examinations made by Mr. W. L. Harnett.)

Case of Femoral Hernia with Partial Strangulation; External Rupture, followed by Fæcal Fistula.

MRS. A., aged 42, was admitted to the West London Hospital under Mr. L. A. Bidwell, on June 20, 1905. Three and a half weeks previously, about 11 p.m., she had been suddenly seized with severe pain in the lower abdomen, and during the night she was sick frequently. For the next four days the sickness and pain continued, and the bowels were opened twice slightly. On the fifth day the bowels were well moved by enema, and after this time she felt much better and was able to take ordinary food without sickness. She remained in bed, however, and on the seventh day the enemata failed to relieve the bowels. For some years she had had a lump in the left inguinal region, which became painful and tender at the onset of the illness. It was poulticed, and after about ten days the swelling ruptured, discharging offensive matter, and, later, fæcal material with flatus. The day before admission sickness again set in, but this had ceased before patient came into the hospital.

On admission a reddened swelling was noted in the left groin, with a small orifice on its surface, through which fæcal material was discharging.

On June 21 Mr. Bidwell operated. The fistula was plugged and temporarily closed with sutures. The abdomen was then opened in the left iliac region. The bowel going to, and that coming from, the incarcerated portion were cut through and the ends united by end-to-end anastomosis. The terminations of the exsected portion were invaginated and closed. The

abdominal wound was then closed in three layers, and the plug removed from the fistula.

The abdominal wound healed without trouble, and the bowels acted on the third day. The stitches were removed on July 1, and the patient left the hospital on July 12. There was then a discharging sinus leading into the exsected portion of gut.

On August 26 she was readmitted for further operation. The discharge from the sinus now consisted of watery mucus only. Two days later the following operation was performed. The fistula was syringed out and plugged; the external orifice closed by sutures. An elliptical incision was then made, including the fistulous opening, and the portion of gut and the sac dissected out and pulled down into the wound. The mesentery of this portion was tied off by interlacing ligatures, the stump returned into the abdominal cavity and the peritoneal sac closed. The exsected portion of gut which was removed measured about eight inches in length.

The after progress of the case was uneventful, and the patient was discharged with the wound quite healed on August 18.

Remarks by Mr. Bidwell.—This case is an example of a very rare condition, namely, the simulation by a strangulated hernia of a glandular abscess. The symptoms of strangulation, however, were not severe, the reason being that the hernia only involved a portion of the circumference of the bowel (Richter's hernia), and that there was never absolute obstruction. The method of treatment also requires some explanation. When the patient came under observation there was a large abscess occupying the hernial sac through which fæces were discharged. It would have been impossible to avoid fouling the peritoneum had this sac been laid open and the fæcal fistula treated in the ordinary way. I, therefore, preferred to make a separate abdominal incision, and do an end-to-end anastomosis between the portion of bowel going to and that coming from the constriction, and to leave the removal of the portion of gut containing the fistula to another time. This certainly involved the least risk.

A Case of Movable Kidney leading to Hydronephrosis.

E. C., aged 54, a married woman, the mother of two healthy children, was admitted to the West London Hospital in the beginning of September of this year. She stated that for some six months she had been suffering from frequent attacks of pain in the left side of the abdomen, each being followed

by a flow of urine, large in amount, and often discoloured. During her stay in hospital she had a very definite attack, and the urine on this occasion contained pus and blood. The patient was otherwise well, but had laterly lost weight considerably.

Drs. Nolan and Ambrose, who sent the patient to hospital, considered the condition to be intermittent hydronephrosis due to movable kidney.

On examination a tender spot was found 2 inches to the left of the umbilicus, and a rounded, rather fixed lump was felt in the same situation. The right kidney could be felt during deep inspiration.

Mr. Keetley operated on September 15. Through an incision along the outer part of the left rectus the left kidney was felt, irregular in consistency, and more or less immovable, especially at its lower extremity, which was lumpy. The anterior wound was closed, and the kidney exposed through a lumbar incision. It was found closely adherent to the thickened and hardened perirenal fat, from which it could be separated with difficulty. It was everywhere distended with urine, but not tensely. The kidney was freed and brought to the surface, opened and emptied of some ounces of urine by an incision towards the lower pole, and sutured to the upper end of the opening in the lumbar muscles and skin. Gauze packing and a drain were inserted. The object aimed at was the drainage of the kidney, its fixation, and the cure of the hydronephrosis. The patient was much relieved by the operation, and there has been no return of the pain. The wound is contracting, but there is still some discharge of urine through the lumbar fistula.

The cause of the trouble appears to have been the mobility of the kidney leading to occasional kinking or twisting of the ureter, with the necessary result of an attack of distension and pain, and gradually irritating the kidney into a condition of chronic adhesive inflammation.

Reviews and Notices of Books.

BIDWELL ON INTESTINAL SURGERY.[1]

A VALUABLE little monograph, well printed and excellently illustrated. Although the author in his preface modestly says the little volume aims at giving such a precise description of the commoner intestinal sutures that an inexperienced surgeon may readily practise the various methods on dead intestine before performing an anastomosis on the living subject, yet the text of the book includes a great deal more. There are, for instance, chapters on the management of gangrenous intestine caused by strangulation, operations on the appendix, and incisions into the abdomen.

Very accurate and clear details are given of the chief methods of anastomosis and a comparison drawn between them. In considering gastro-enterostomy, Mr. Bidwell asserts that for non-malignant obstruction of the pylorus he is in favour of the posterior route, while for advanced carcinomatous stricture the anterior method yields the better results.

Pyloroplasty is rightly relegated to limbo in favour of gastro-enterostomy, which if properly performed is of much greater service in every way. Colotomy is best performed, the author considers, by suturing the parietal peritoneum, and subsequently the skin, through, or rather across, a vertical slit in the meso-sigmoid. This method is undoubtedly a sound one, but it would have been well to have given a word of warning concerning the possibility of obstinate after-contraction and its prevention. It is a pity, perhaps, in a work of this kind to have introduced any mention of liquid injection for intussusception, for the space used for its inadequate description would have been better utilised for a fuller account of operative procedure. The chapter on abdominal incisions and their closure could hardly be improved upon. The remaining chapters in the volume deal with the preparation for and the after-treatment of abdominal operations. The first is not too clearly written so far as the preparation of an operation room in a private house is concerned, but the directions given concerning sponges, ligatures, &c., are satisfactory. The after-treatment of abdominal operations is most important, and Mr. Bidwell has done well to include an account of it in his last chapter, where many practical details will be found and must prove to be of considerable service to surgeon, practitioner and nurse. The statements made for the exhibition of alcohol after abdominal operations will not meet with the approval of most surgeons, and it is even a moot point whether the 16 ozs. of brandy and 18 ozs. of champagne per day would be considered advisable by any, even after a most severe operation. The book will be read with interest by all interested in intestinal surgery.

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[1] "A Handbook of Intestinal Surgery." By L. A. Bidwell, F.R.C.S., Surgeon, West London Hospital; Dean of the West London Post-Graduate College. Pp. 167; illustrations 91. London: Baillière, Tindall and Cox, 1905.

SWINFORD EDWARDS ON CARCINOMA OF THE RECTUM.[1]

THIS small book contains a concise, well-arranged and carefully written description of cancer of the rectum and its treatment. The subject is dealt with from a practical point of view, the method of physical examination and the operative procedures being described in considerable detail.

It gives, in fact, a summary of the views and methods of one who has had considerable experience of the disease, as is shown by the tabulated list of the author's cases at the end of the book.

Although other methods of operation are described, the one which finds favour with Mr. Swinford Edwards, and which therefore he enters into with the fullest detail, is the trans-sacral route.

SUTHERLAND ON DISPENSING.[2]

IN reviewing the first edition of this work we ventured to predict that it supplied a long-felt want to the practitioner who dispenses his own medicine, as not only did it give some very useful formulæ, but it gave valuable advice as to the best, quickest and cheapest methods of dispensing drugs.

That this prediction was correct is evidenced by the fact that a large edition has been exhausted in a year, and we can only repeat our advice that every medical man engaged in dispensing should obtain a copy, and he will find that it will fully repay its perusal in time and expense.

The contents have been thoroughly revised and brought up to date, and may well be read by every medical man in active practice, as it is full of useful hints.

WATSON ON NATURAL SCIENCE IN HYGIENE.[3]

THIS little book, dealing with animal and vegetable parasites affecting man, is written for students in public health, and it is presumed will be found useful to them, although there is little to be found in this work which is not contained in the ordinary medical text-books. A semi-diagrammatic form of the life-cycle of these parasites is used, and is of value in more readily imprinting it on the memory. No attempt is made to deal with bacteria.

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[1] "Carcinoma of the Rectum: Its Diagnosis and Treatment." By F. Swinford Edwards, F.R.C.S. Pp. 47. Price 2s. 6d. London: Baillière, Tindall and Cox.

[2] "Dispensing made Easy." By Wm. G. Sutherland, M.B.Aberd. Second Edition. Pp. 105. Price 3s. 6d. Bristol: John Wright and Co.

[3] "Natural Science in Hygiene; or, a Life-history of the Non-bacterial Parasites Affecting Man." By James Rodger Watson, M.A., B.Sc., M.D.Ed. Pp. 62. Price 1s. 6d. Bristol: John Wright and Co, 1905.

FREELAND ON THE RADICAL CURE OF CORNS AND BUNIONS.[1]

A SMALL pamphlet consisting of a paper read before the Willesden Medical Society on the treatment of corns and bunions. The author points out the uselessness of the ordinary method of treatment by solvents and cutting as practised by chiropodists, and shows how they may be permanently removed by the excision of the corn and its underlying bursa. He is undoubtedly correct, and much pain and suffering might be saved if surgeons would pay a little more attention to a trivial but often an agonising complaint. The operation of excision of the head of the first metatarsal bone is the one recommended for the cure of a bunion on the great toe.

ROYAL DENTAL HOSPITAL PHARMACOPŒIA.[2]

A LIST of the formulæ in use at the Royal Dental Hospital, which should prove of use to dental students and junior practitioners. There is a useful appendix containing a list of poisons with their antidotes and remedies, and a summary of the treatment of dangerous symptoms supervening during the administration of anæsthetics.

CURGENVEN ON CHILDREN'S DIET.[3]

MANY books have been written on the dietary of infants of more or less value. This may be recommended to parents or nurses in charge of children, as it is written by a practitioner of large experience, and simply and clearly points out the general principles on which a child should be fed, and the direction in which most mistakes are made. Chapters are given on the dietary of children suffering from gastric disorders, and a useful list of recipes for the preparation of food is given. We think this book will be found to be of considerable value in the household.

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[1] "The Radical Cure of Corns and Bunions." By E. Harding Freeland, F.R.C.S.Eng. Second Edition. Pp. 34; illustrated. London: John Bale, Sons and Danielsson, Ltd., 1905.

[2] "Pharmacopœia and Formulary of the Royal Dental Hospital of London. Pp. 24. Price 1s. 6d. London: John Bale, Sons and Danielsson, Ltd., 1905.

[3] "The Child's Diet." By J. Sadler Curgenven, M.R.C.S., L.R.C.P. Pp. 96. London: H. K. Lewis, 1905.

LIBRARY REPORT.

For the year ending May 31, there have been 55 new books added to the Library; of this number 5 were purchased, 4 presented, and the remainder, namely, 46, received for the purpose of review in the JOURNAL of the Society.

The Loans have amounted to 406, being an increase of 56 over the previous year. It may be noted that more than half (*i.e.*, 244) were subscription copies from Messrs. Lewis, proving the continued popularity of this addition to the resources of the Library.

There has been an expenditure of £5 1s. in the purchase of new books, of which sum £5 is now guaranteed by a grant from the Society, to be expended annually in new volumes. The Librarian has to report the apparent loss of one book, in spite of the vigilance now exercised, namely, Martindale's "Extra Pharmacopœia," 1904 edition.

The financial position of the Library Fund is very satisfactory, showing a balance in hand of £11 1s. 11d., against £7 3s. 11d. last year, being a net gain of nearly £4. This has been accomplished by an increase in the revenue rather than by a diminution in the expenditure; which as a matter of fact is about the same as the preceding year.

To the Post-Graduate College must be attributed this satisfactory state of affairs, as the Members of the Society are still backward in assisting financially the welfare of their Library, though they are certainly more alive to its advantages than heretofore. There is every reason to believe that the Library will continue to improve in the future as it has done in the past, and that such advancement will make for the benefit of the Society to which it has the privilege to belong.

HERBERT W. CHAMBERS,
Hon. Librarian.

LIST OF BOOKS RECEIVED.

Intestinal Surgery. By Leonard Bidwell, F.R.C.S. London: Baillière, Tindall and Cox, 1905.

Carcinoma of the Rectum. By F. Swinford Edwards, F.R.C.S. London: Baillière, Tindall and Cox, 1905.

Dispensing made Easy. By Wm. S. Sutherland, M.B.Aberd. Second Edition. Bristol: John Wright and Co., 1905.

Natural Science in Hygiene. By J. R. Watson, M.D.Edin. Bristol: John Wright and Co.

The Radical Cure of Corns and Bunions. By E. Harding Freeland, F.R.C.S. Second Edition. London: John Bale, Sons and Danielsson, Ltd., 1905.

The Child's Diet. By J. Sadler Curgenven, M.R.C.S. London: H. K. Lewis, 1905.

Pharmacopœia of the Royal Dental Hospital. London: John Bale, Sons and Danielsson, Ltd., 1905.

A DESCRIPTION OF EXCURSIONS TO BIARRITZ, PAU, CAUTERETS, ARGÈLES, SALIES-DE-BÉARN, AND ARCACHON FOLLOWING ON THE MEDICAL VISIT TO PARIS.

By FREDERICK J. MCCANN, M.D.Edin., F.R.C.S.Eng.

ON Sunday, May 14, a party numbering 40, composed of British physicians and surgeons, accompanied by several ladies, left Paris in a special saloon carriage for Biarritz. The weather being all that could be desired, an excellent view of the surrounding country was obtained, and *la belle patrie* in all its springtide freshness seemed to breathe forth a joyous welcome. The comfort of the travellers was enhanced by the provision of an excellent *déjeuner*, and dinner, served during the journey.

Biarritz was reached at ten o'clock on Sunday evening, and carriages were in waiting to convey the visitors to the casino. All Biarritz turned out to welcome her guests, the approaches to the casino being lined by enthusiastic crowds. The town itself was illuminated, and a salvo of cannon was fired on the arrival of the visitors. The guests, on alighting at the casino, were received by the Maire, M. Forsans, who cordially bade them welcome in a felicitous speech, to which Director-General A. H. Keogh responded. Refreshments were partaken of at the casino, and *l'entente cordiale* was toasted.

On the following morning the assembled guests, accompanied by the Maire and the muncipal councillors, drove in special carriages to the Thermes-Salins de Biarritz. The arrangements of the baths were explained, and the excellence of the organisation was much admired. A visit was then paid to the golf club, where refreshments were offered, and where a photograph was taken. The visitors re-entered their carriages and were driven along the plage, whence an excellent view of the wide expanse of the sea-front was obtained. A visit was paid to the English club, where refreshments were again provided, and then the guests returned to the Palace Hotel, the former Palace of the Empress Eugénie. A sumptuous *déjeuner*, to which a large company had been

invited, awaited the visitors on their return. A military band, sent specially from the garrison at Bayonne, discoursed sweet music during the repast. The Maire presided over the assembled company, and in a graceful speech welcomed the British visitors. Director-General Keogh and Mr. J. A. Bloxam responded.

After the *déjeuner* the visitors left for Pau, which was reached about 6 p.m. A banquet was given at the Winter Palace under the presidency of the Maire of Pau, who welcomed the visitors. Amongst the guests were the Préfet of the Basses-Pyrénées, and H.B.M. Vice-Consul. A concert of vocal and instrumental music followed the dinner, and the excellent choral singing was a feature of this entertainment.

On Tuesday morning motor cars were placed at the disposal of the party, and a visit was paid to the Château of Henry IV., which contains some fine old tapestries. The guests were then driven into the country to visit the kennels and golf course. *Déjeuner* was provided at the Hôtel Gassion, and the Hôtel de France.

Leaving Pau by train at 2 p.m., the party journeyed to Cauterets, which was reached at 3.30 p.m. A beautiful view was obtained of the snow-clad peaks of the Pyrénées, and the wonderful vegetation extending upwards almost to the snow-line. The reception at Cauterets was picturesque, and in keeping with the magnificence of the surroundings. On the platform the Corps of Guides was drawn up in line, accompanied by their band, which played the British National Anthem as the train drew up. The Guides, in their pale blue uniform with white leggings, presented a striking appearance. They were medium-sized, thick-set, bronzed mountaineers who, from their physique and bearing, were evidently accustomed to feats of endurance. The Maire of Cauterets received the visitors, who then drove in procession, headed by the Guides, to the hotel, where tea was served. They then embarked on the electric railway, and afterwards journeyed in carriages to the Pont d'Espagne.

Cauterets, from its situation and climatic advantages, deserves to be more widely known in this country. It is situated at an altitude of 935 metres, and is surrounded by lofty mountains, the snow-clad summits and luxurious vegetation of which add to the grandeur of the scene. Indeed, a trip up the mountains on the electric railway discloses a scene of magnificence and grandeur which leaves a lasting impression on the traveller. At the Pont d'Espagne a fine view was obtained of the rushing torrent which takes its source in the Lac de Gaube. The approach of a mist prevented the party from extending their excursion to the Lac, but all returned to the hotel delighted with the wonderful panorama.

The best efforts of Mr. Meillon had been directed to giving the guests an excellent banquet on their return. The Maire of Cauterets again welcomed the visitors, and suitable replies were made. After dinner some capital photographs were shown on the lantern by Dr. Meillon. These illustrated the experiences of mountaineers in this region, and the lucid explanations, given in English by Dr. Meillon, added greatly to the value of the photographic exhibition. Dancing was also enjoyed, and formed a fitting conclusion to one of the most enjoyable days of the tour.

On Wednesday morning an early visit was paid to the thermal establishment, and an opportunity was afforded to try the sulphur waters. These waters are specially suited for catarrhal states of the nose, throat and air passages, and have already obtained considerable renown. But time pressing, a start had to be made to catch an early train to Argèles, after an affectionate *au revoir* to Dr. Meillon and his father, and to the Maire of Cauterets. Every member of the party felt the warmth of their welcome to this picturesque spot, the pure clear air of which had, even in the short time, produced its invigorating effect, and where everything had been done to add to their comfort and enjoyment. A word must be said of the great kindness of Dr. Meillon who, alike as travelling companion, guide, lecturer and, last, but not least, pianist, showed his remarkable versatility, and was indeed a "host in himself." He will be sure to have an enthusiastic welcome when he comes to London.

After arriving at Argèles the party visited the Medical Institute, where the apparatus for the treatment of orthopædic cases was exhibited, and they were later entertained to *déjeuner* at the Hôtel du Parc, which is prettily situated in a wooded garden. Speeches were made by the Maire and others. The intelligence that the Préfet of the Hautes Pyrénées was prevented from attending by an accident to his child was received with regret. The Sous-Préfet, by his cordiality and *bonhomie*, endeared himself to all the members of the party, and proved an excellent substitute. His health was proposed and drunk with enthusiasm.

A drive of five miles through a beautiful bit of country took the party to Lourdes. Here a hurried visit was paid to the grotto, the sacred pool and the church. The party then left by train for Salies-de-Béarn, where they were met at the station by the Maire, Dr. Matton, and other medical men. They were conducted over the salt-works and the thermal establishment. Dinner was served at the different hotels, and afterwards a reception was given at the thermal establishment, followed by a concert. Speeches were made by the

Maire and others, and a most enjoyable evening was spent. Some of the party left for Paris, while others remained for the night at Salies-de-Béarn.

The town is situated in a Pyrenean valley, and is much used as a health resort by the French and Spanish, but is not sufficiently well known in the British Isles. The climate is mild and sedative, being well suited for convalescents and nervous patients. The bromo-iodine salt springs have already obtained considerable reputation in the treatment of tubercle, anæmia, and other disorders.

Mr. Rose, the proprietor of the Grand Hôtel du Château, rendered great service to the visitors during their sojourn at Salies. Dr. Matton, of Salies, to whom the idea of having this tour to the south of France was mainly due, did everything in his power to promote the comfort and enjoyment of the guests.

Some of the party journeyed on the following day to Arcachon, where a delightful afternoon was spent in viewing this charming health resort. A cordial invitation was extended to them to remain another day and enjoy the hospitality offered by M. de Galne (Président du Syndicat d'Initiative), Dr. Festal and M. Ferras (members of the Administrative Council). In the evening the party returned by train to Paris, arriving next morning at the Quai d'Orsay.

Thus terminated one of the most enjoyable tours which has ever been organised. To say that the journey through France was a triumphal progress is no exaggeration, as the kindness and hospitality of the towns visited were beyond all praise. Many graceful compliments were paid to the visitors by their French hosts, and many new friendships were made. The ladies of the party were specially favoured with presents of choice flowers during the journey.

Amongst the large number of those who aided in making the visit such a pronounced success, special mention must be made of the Préfet of the Hautes Pyrénées, the Sous-Préfet of Argèles, the Président of the Vallée, the Director of the Funicular Railway (who had travelled specially from Paris), the Maire of Cauterets, Dr. Meillon and his father, and, last, but not least, Dr. Matton. The aid given by the British authorities was also much appreciated. The party was under the charge of Dr. Leonard P. Mark, of London, an accomplished French scholar, whose uniform courtesy and tact made him popular with all members of the party. Acting as spokesman and interpreter, his services were invaluable.

Vive la France ! Vive l'entente cordiale !

THE POST-GRADUATE COLLEGE.

By the Dean.

The Vacation Course commenced on Thursday, August 8, and was well attended throughout. During the past three months 66 Post-Graduates have attended the College. Amongst these were 13 officers of the Naval Medical Service, 4 of the Royal Army Medical Corps, 4 of the Indian Medical Service, and 16 from the Colonies and abroad. The number of Life Members of the College is now 71. Special Classes have been held in the following subjects: Diseases of the Eye (2), Practical Administration of Anæsthetics (1), Tutorial Class in Medicine (2), Examination of the Throat, Nose and Ear (1), Intestinal Anastomoses (3), Skiagraphy (3), Bacteriology (2), Clinical Examination of Blood and Urine (2), Operative Surgery (3).

We have to congratulate Lieutenant T. Scatchard on obtaining a commission in the Royal Army Medical Corps, and Lieutenant E. J. C. MacDonald on obtaining one in the Indian Medical Service.

The Winter Session opens on Wednesday, October 11, when the Opening Address will be delivered by the President of the Royal College of Surgeons at 5 p.m. Tea and coffee will be served at 4.30 p.m. Members of the Society are cordially invited to attend, and invitation cards may be obtained on application to the Dean.

The following is a list of Post-Graduates who have attended the practice of the West London Hospital for the past three months. An asterisk is placed against the names of those who are Life Members:—

*L. H. Armstrong (Ripon).
*D. Arthur (Ealing).
Fleet-Surgeon J. Andrews, R.N.
J. Vere Arkle (Adelphi).
*G. J. Bagram (Bayswater).
*A. Baldock (Earl's Court).
G. W. Barber (U.S.A.).
*W. E. Barton (Streatham).
*A. G. Beale (Kensal Rise).
S. H. Belfrage (Montague Place).
*Deputy-Inspector-General R. Bentham, R.N.
Staff-Surgeon R. S. Bernard, R.N.
W. P. Biden (Hyeres).
Lt.-Col. E. Bovill, I.M.S.
F. Bowe (Timaru).
Capt. A. W. N. Bowen, R.A.M.C.
*R. D. Brinton (S. Kensington).
*H. F. Browne (Langham Street).
F. C. Bryan (Bayswater).
Major J. B. Buchanan, R.A.M.C.
*W. M. Burgess (Harlesden).
Surgeon E. T. Burton, R.N.
*M. J. Cadell (Bayswater).
*Capt. Carmody, R.A.M.C.
*Major E. R. W. Carroll, I.M.S.
H. W. Chambers (Hon. Member) (Shepherd's Bush).
*Col. Clitterbuck (Bayswater).
*E. J. Coulson (Fulham).
H. Evelyn Crook (Twickenham).
Fleet-Surgeon J. Crowley, R.N.
*J. S. Curgenven (Bayswater).
G. G. Davidson (West Kensington).
F. S. Dawe (Chiswick).
Fleet-Surgeon J. J. Dennis, R.N.
*L. Dobson (Kensington).
W. Barclay Dick (West Ealing).

Surgeon W. P. Dyer, R.N.
Surgeon A. G. Eastment, R.N.
C. W. Emlyn (Bayswater).
*A. St. Aubyn Farrer (Paddington).
*W. H. Fitzmaurice (Dunmanway).
*Fleet-Surgeon A. M. French, R.N.
W. Fowler (Detroit).
W. E. Fry (Hammersmith).
*M. N. Gandevia (Ceylon).
*F. Gans (West Kensington).
*H. M. Gay (Southampton).
*D. Gault (New Zealand).
A. H. Gerrard (Chiswick).
Major T. W. Gibbard, R.A.M.C.
*A. J. Grant (West Kensington).
*W. Grantham Hill (Chiswick).
Surgeon R. W. B. Hall, R.N.
*C. H. Haines (Kensington).
*C. S. Hancock (Leytonstone).
*W. Allen Harmer (Tonbridge).
*A. Harrison (Yeovil).
*N. Heard (Kensington).
E. W. Hedley (Westminster).
Fred. A. Hill, R.N. (Stroud).
*W. C. James (Kensington).
*Capt. Johnson, R.A.M.C.
M. P. Kerrawalla (India).
*Alexander Krakowsky (West Kensington).
*R. A. Kirby (Westminster).
*W. B. Kirkaldy (West Kensington).
T. B. Kobbekaduwa (Ceylon).
Staff-Surgeon M. C. Langford, R.N.
C. R. Lawson (U.S.A.).
Lees, C. A. (West Ealing).
*T. M. Legge (Temple).
C. K. Levick (Havant).
Surgeon Bernard Ley, R.N.
Mario Licciardelli (Catania).
*T. Ligertwood (Chelsea).
E. M. Livesey (New Zealand),
W. H. Lougheed (N. Somercotes).
*J. Lynes (Kensington).
*A. Barclay Lyon (Hammersmith).
Lieut. E. J. C. Macdonald, I.M.S.
*Norman MacDonald (Harlesden).
*G. Maguire (Kew).
*W. Hooper Masters (Barnes).
*E. D. Macdougal (Walton-on-Thames).
D. Macdougall (Dover).
*J. B. Mackay (Isle of Wight).
*H. McNickle (Vauxhall).
*D. F. Maunsell (South Kensington).
A. Kinsey Morgan (Bournemouth).
Major G. T. Mould, I.M.S.
*B. W. Mudd (Storrington).
J. C. Muir (Fulham).
W. C. C. Muir (Melbourne).
R. E. Murray (India).
W. Nolan (Bayswater).
*W. Norbury (London).
*R. W. Olver (New South Wales).
*H. M. Page (Kensington).
H. Compton Parsons (Devon).
W. Harland Peake (Hampstead).
*A. F. Penny (Chelsea).
*R. D. Pollock (Acton).
Douglas R. Pike (Kensington).
*A. Renny (Southampton).
Surgeon C. R. Rickard, R.N.
*A. H. Rideal (Twickenham).
*Patrick Robertson (Canada).
*A. Tait Robinson (Portman Square).
*Neil Robson (Sittingbourne).
*F. E. Rock (Hammersmith).
*T. Mackay Ross (Fulham).
*Lieut.-Col. Silcock, I.M.S.
J. J. Scanlan (Cork).
M. Y. Shanahan (Ireland).
Surgeon A. I. Sheldon, R.N.
Surgeon C. R. Sheward, R.N.
*G. A. G. Simpson (Acton).
*A. Ross Sinclair (Parson's Green).
*W. Slater (Epping).
*H. H. Sturge (Maida Vale).
*E. Swain (Hampton Hill).
H. A. Swanton (Ireland).
F. C. Tothill (Staines).
Capt. Jno. Stephenson, I.M.S.
W. R. Tomlinson (Moree, N.S.W.).
E. F. Travers (Kensington).
*L. A. Walker (Ladbroke Grove).
R. M. Truter (Oudshorn, Cape Colony).
G. R. Twomey (W. African Med. Staff).
*H. W. Walter (Brentford).
D. R. Ulmer (Indianopolis).
*J. Williamson (Putney).
J. H. Wolfe (Hanwell).
*A. P. Woodeforde (Shepherd's Bush).
A. H. Weeks (Maine, U.S.A.).
Oswald S. Wraith (Darwen).
Capt. C. Seaver-Smith, R.A.M.C.

NOTES ON NEW PREPARATIONS, &c.

DURING the last four years enormous strides have been made in the application of electricity in medical science, and no modern hospital is now complete without an equipment of electrical apparatus.

Messrs. Lemmon and Co., of 19, Hanover Square, have recently erected a very complete installation at Guy's Hospital which is worthy of notice. In the first room is installed the Finsen Light Apparatus, consisting of a powerful arc lamp carrying four telescopes with the necessary rock crystal lenses for the concentration of the rays, and cooled by means of water jackets supplied with running water from the main. Around the four telescopes are arranged couches on which the patients lie for treatment. A smaller Finsen Reyn lamp, with a special type of self-feeding arc lamp, is also supplied, mounted on a movable stand, designed to give every possible movement and height required. This is a particularly useful lamp for small institutions and doctors in private practice. Messrs. Lemmon also supply another very useful lamp, which is a modification of the Lortet-Genoud pattern. The rays from a hand-feed arc lamp are projected through a double shield, having two rock lenses water-cooled set in its centre. No compressor is required, as the front lens of the shield is pressed against the patient.

A very complete installation of high frequency apparatus is also supplied. The current for this installation is taken from the main and passed through variable resistances on a switchboard. Two cubicles are fitted up with these instruments, one being specially adapted for the application of Röntgen rays for therapeutic purposes. A switchboard for galvanism, faradaism, combined currents and electrolysis is also supplied, fitted with special circular wire rheostats of 10,000 ohms resistance divided into fifty-six gradations, allowing of very fine gradations of current to the patient. Great success has attended the use of these currents in conjunction with a special arm or leg bath in rheumatism, paralysis and neuritis. Another switchboard is constructed to give galvanic, faradaic, combined and sinusoidal currents at the same time, in different parts of a bath or to separate patients, and is a most interesting piece of work. Finally, a motor vibrator is supplied to give vibratory massage, in cases where formerly manual methods were used, and it has been found that the results are immeasurably superior to those gained by other methods of massage. The whole electrical installation, therefore, is most

complete, and reflects great credit on Messrs. Lemmon and Co., who designed and carried out the work.

We have received from **Messrs. Parke, Davis and Co.** the following new preparations:—

Acetozone Inhalant.—This is a powerful germicide, deodorant and local anæsthetic. It contains 1 per cent. of acetozone dissolved in liquid petrolatum, a colourless, odourless liquid paraffin. The inhalant is used as a spray from a nebuliser after the nasal chamber has been thoroughly cleansed with an alkaline solution. The germicidal action takes place only after the acetozone has been hydrolysed by the moisture of the mucous membrane, and this ensures the therapeutic application of the per-acids whilst these are in the nascent condition.

Adrenalin Inhalant.—This preparation consists of a solution 1 : 1,000 of adrenalin chloride in an aromatised neutral oil base with 3 per cent. of chloretone. It is an excellent application in inflammatory affections of the nose and throat, and is recommended as a soothing and antiseptic astringent in acute rhinitis or coryza. The best results are obtained by spraying it into the nasal passages from a nebuliser. It is of great service in the treatment of hay fever and chronic nasal catarrh, and superior to any other astringent agent, because of its bland nature in the treatment of pharyngitis, tonsillitis and laryngitis with aphonia. It may also be used as a lubricant for urethral instruments, tending to reduce the turgescence of the mucous by its astringent action.

Adrenalin Ointment.—One thousand parts of this preparation contain one part of adrenalin chloride in a bland, unirritating oleaginous base. It is adapted to the treatment of inflammatory conditions of the mucous membrane of the nose in coryza or rhinitis, hay fever and asthma, and is also a useful application to inflamed surfaces, such as external and internal hæmorrhoids. It is put up in collapsible tubes provided with an elongated tip, to facilitate introduction into the nose, urethra and external ear, and by means of an ointment syringe within the rectum.

Messrs. Thos. Christy and Co., of Old Swan Lane, London, E.C., forward us a safety "Lock and Key" bottle, to contain carbolic acid or other poisons, which they are introducing in order to prevent the administration of these poisons by mistake for medicine. The device, which is a very simple and neat one, closes with a snap fastening and can only be opened

with a small key, which may be attached to the neck of the bottle or removed altogether for safety's sake.

Messrs. Christy propose to supply this "Lock and Key Bottle," containing the usual quality of carbolic acid used for disinfecting purposes, at the same price as commonly sold to the public in an ordinary bottle. They are also supplying empty bottles with the same fitment for locking up all poisons, and we should anticipate a large sale for them.

Pleated Compressed Bandages and Dressings, "Tabloid" Brand.—The medical profession is accustomed to associate the name of Burroughs Wellcome and Co. with the many excellent medicinal preparations issued under the "Tabloid" and "Soloid" brands, which are characterised by the purity of their contents and by the accuracy of dosage of each ingredient. The firm really covers a much wider field, and has recently given attention to the preparation of bandages and general surgical dressings, with results in every way praiseworthy. "Tabloid" Bandages and Dressings embody many of the principles which have obtained for the other products of this firm a deserved popularity. The material of which they are composed, and the antiseptics employed in the medicated dressings, are of the finest quality. The medicament is evenly distributed throughout, and the fine texture of the fabric is uninjured in the process. To the general practitioner, whose surgical or obstetric bag is cumbered with the large packets of cotton-wool and lint and the loosely rolled bandages such as have hitherto been available, these compressed goods will come as a revelation. Their compactness and shape (three yards of gauze is a packet measuring 2 inches by 1 inch) enable him to carry, in a minimum of space, all the necessary dressings in a day's routine practice; indeed, the requisites can easily be stored in a coat pocket. The various gauzes will be found satisfactory as drains, for packing cavities, or for covering wounds, whilst the medicated lint and wool ensure that antisepsis is maintained. In the country, and in emergency cases, these new products should quickly establish their popularity, for their superiority over the ordinary preparation is as manifest and their advantages are as obvious as are those of "Tabloid" drugs over the bulky medicines of a former day.

The bandages and dressings are pleated, and this permits them to be easily unfolded. Their covering of parchment paper, and outer wrapping of tinfoil, keep them free from contamination, and, last but not least, their price is but slightly in excess, if at all, of that charged for the same quantity of material in the usual bulky form.

NOTES AND NEWS.

WITH this number of the JOURNAL the termination of another Session is reached, and we are happy to be able to state that it has been one of continual progress and success. Of course with our large numbers it is impossible to hope for such a progressive increase as we have had in the past, more especially as we are beginning to feel the competition of neighbouring societies. But as we ventured to predict this time last year, under the Presidency of Mr. C. M. Tuke everything has gone well, the meetings have been well attended, the discussions have been interesting, the Cavendish Lecture was one of the most interesting we have had, and, last but not least, a perusal of the Annual Report will show that the Society, thanks to untiring and watchful care of our Honorary Treasurer, Mr. Gunton Alderton, is in a sound condition as regards its finances.

We feel sure that all our members join with us in congratulating Mr. C. M. Tuke on the successful manner in which he has carried out the duties of his office. Those members who were unable to accept his invitation to the Garden Party held at Chiswick House the day after the Conversazione missed a rare treat. The famous grounds were looking their best, a fine band discoursed music during the afternoon, and with Mr. and Mrs. Tuke looking after the comforts of their guests nothing was wanting. The gathering was all the more pleasant, as those attending being acquainted with each other to a very large extent, there was none of that stiffness that is often so painfully apparent at meetings of this sort. The opinion heard on every side was that it was a very great success, and there was an unaminous wish that on some future occasion Mr. Tuke might be able to repeat the invitation.

On the suggestion of Mr. H. Chambers, several of our members owning motor cars agreed to wind up the week with a run. Accordingly, with the President and several other guests on board, five cars made their way to Virginia Water, where Mr. Chambers had arranged a capital lunch. This partaken of, the opportunity of a stroll round the lake and in the adjoining forest was seized and thoroughly enjoyed. After tea a run home in fine weather completed a very enjoyable day's pleasure.

By the time that these notes appear in print the holidays for the most of us will be over, and we shall have returned full of energy for another year's hard work. In connection

with this subject we have often been surprised at the short period of rest which many men in active practice allow themselves. This cannot be wise, for of all harassing professions ours is assuredly the most trying, and there is nothing like a thorough rest and change of scene for enabling us to continue our work successfully. We are fully aware of the difficulty which arises in finding a suitable substitute to take our place, but at the present time when it has become an almost universal custom for everybody to take their holidays in the month of August, it surely is not a matter of such great importance. As a matter of fact, patients do not always appreciate their own doctor until they know that he is out of reach for some weeks, and they have to call in some one who "will do." It is a pretty serious matter to depend upon "some one who will do," and the comparisons that are made by patients are generally in favour of the one who is away.

Mr. C. B. Keetley has written to us concerning a scheme for organising a medical reserve to carry out Army Medical duties at home, in case of a great war. As it is a matter of great interest, we quote his letter:—

"The Director-General of the Royal Army Medical Corps has pointed out that, in the case of a great war, owing to the great demand on the Corps for active service, he would be the only member of that Corps left in the kingdom. There would be no trained Medical Reserve. There would be the volunteer medical officers, but they would have their own duties. Lord Roberts said recently, speaking of the Army in general, 'There is a great deal more necessary, and that is that, in addition to the Army and Reserve forces, there should be a great potential reserve of the whole nation.' The Director-General is most anxious to see a great potential reserve of the medical men of the nation. It seems to me that this could be furnished without any great sacrifice on any one's part. Medical men possess medical knowledge to begin with. They have not to learn to shoot. From a soldiering point of view, therefore, a doctor is comparable to a gamekeeper, or, better still, to a volunteer who has made rifle-shooting his hobby. All the medical man needs is instruction in the official and routine duties of a medical officer in charge of a hospital, or of a body of troops. I am assured by the highest authorities that this could be given in a dozen lessons, or less. No drill is required. I think that in the case of a large number of medical men who are not officers of volunteers, that it would not ask too much of their patriotism for them to be willing to receive these lessons.

All medical men who thus qualified themselves could be organised into a corps with strictly local subdivisions. *In the case of a great war no member of this corps should be expected to do Army Medical duties at any great distance from his own locality, or without proper payment.* No expense in uniform would be required.

"I should like to see this movement commence at Hammersmith, and among the members of the West London Medico-Chirurgical Society. In time of war what the medical men of our district would be expected to do would probably be to take charge of Hounslow, and of such other barracks and encampments as would lie in the district. In the case of a battalion being moved, say, from Hounslow to Edinburgh, its medical officer would travel with it to Edinburgh and there hand over his medical charge to a similar local organisation, and he himself return home to his practice. Among the thousands of members of such a Reserve Medical Corps there would be, when war broke out, some hundreds who would be both qualified and willing to serve abroad, in fact, to act as a Reserve to the Royal Army Medical Corps abroad. Without the organisation I have indicated, and without the lessons in time of peace, these hundreds might be willing, but they would be very imperfectly qualified.

"I am writing this entirely on my own responsibility, but not without first assuring myself by consultation with the highest Army Medical authorities that the scheme would be received with favour. The enthusiasm and energy of the present Director-General of the Royal Army Medical Corps are well known, and his intense desire to establish a proper reserve. In fact, his views with regard to the Royal Army Medical Corps are precisely those of Lord Roberts' with regard to the Army in general. I am sure you will agree with me that the country is fortunate in possessing such men at this juncture, and that it is our duty as individuals to second their efforts."

From this we gather that it is proposed that those who are willing should give in their names, and should, when a sufficient number are received, attend a series of demonstrations and instruction in the official and routine duties of a medical officer in charge of troops, and that hereafter they should be at the call of the War Office, in times of war, for service *in their own localities* for a limited period, in routine, in return for adequate payment. If we have understood the suggestions accurately, we should think that a workable scheme could be evolved from them, always provided that they have the sympathy of the Army authorities, of which Mr. Keetley seems to be assured, and that there would be no difficulty in

obtaining members, as this is a very different scheme from the present one, in which, for a paltry remuneration, one can be called upon in times of war, to leave one's practice, and to take up duties anywhere in the kingdom.

THE Secretaries and Treasurer would be very much obliged if members who change their address during the year would inform them of the fact.

COMMUNICATIONS respecting editorial matters should be addressed to the Editor, 71, Holland Park Avenue, W.; those concerning business matters, advertisements, non-delivery of the JOURNAL, &c., should be addressed to the Editorial Secretary, 77, Wimpole Street, W.

Authors desiring reprints of their articles published in the WEST LONDON MEDICAL JOURNAL are requested to communicate with the Editorial Secretary, 77, Wimpole Street, W. Reprints can be obtained at the following prices, if ordered before the publication of the JOURNAL:—

	Pp. 1-4	Pp. 4-8	Pp. 8-16
50 copies	6/-	9/-	12/6
100 copies	7/6	12/-	16/-
200 copies	10/6	16/-	25/-

Special rates are quoted for longer reprints.

We wish to remind members that our columns are always open to them if they will forward to us papers which may be published as original communications, or interesting cases for the "Mirror of Practice." General practitioners, as well as specialists, are constantly meeting with cases of exceptional interest to all of us, and we shall always be pleased to publish them, if they will send them at least a month before publication.

REPORT FOR THE SESSION 1904-5.

Presented by the Council at the Twenty-Third Annual General Meeting, July 7, 1905.

YOUR Council in presenting its Report for the Twenty-Third Session has much pleasure in congratulating the Members upon the continued prosperity of the Society.

Since the last Report 26 Members have resigned. Three Members have died: namely, Mr. J. F. Braga, Dr. Maurice Ling, and Dr. W. Burslem Rotheroe. Fifteen names have been removed under the provisions of Law 28. Forty-three new Subscribing Members have been elected. Thus, there is a decrease of one in the Members of the Society, the total membership amounting to 618.

Your Council regrets to announce the death, during the Session, of a Cavendish Lecturer, Professor Johannes von Mikulicz, of Breslau. Intimation of the death of Professor von Mikulicz was received by the Council on the anniversary of the delivery of his Cavendish Lecture.

The financial position of the Society continues most satisfactory under the able management of the Hon. Treasurer, who again reports a substantial balance.

The circulation of the Journal has steadily increased during the past year. For this we are indebted to the unceasing efforts of the Editor, Dr. Leonard Dobson, and the Editorial Secretary, Mr. John Pardoe. The expenses connected with this increased circulation have led your Council to sanction an increase of the grant from the Society to the funds of the Journal of £10 per annum for the next three years.

The Library has increased in size and usefulness under the care of the Hon. Librarian, Mr. H. W. Chambers. Fifty-five new volumes have been added during the past year, and the arrangement with Messrs. Lewis and Co. for borrowing books as required is working well. The

Librarian reports that the Members of the Society have availed themselves of the advantages of the Library in increasing numbers during the past session, and at the Ordinary Meetings of the Society an opportunity is afforded of inspecting the latest additions to the books.

The Annual Dinner of the Society was held in the Wharncliffe Rooms, Hotel Great Central, on Wednesday, February 8, 1905. The Council are glad to be able to report a record attendance on that occasion, the total number of guests and members being 119.

The Cavendish Lecture was delivered on Friday, June 23, at the Town Hall, Hammersmith, by Dr. James F. Goodhart, the subject being "Disease of the Heart." The President and Council afterwards entertained the Members and their friends at a Conversazione, which was largely attended.

The thanks of the Society are due to the Lady Superintendent and to the Secretary Superintendent of the West London Hospital for their courtesy and assistance to the Officers of the Society.

The following Papers and Clinical Cases have been brought before the Society at its Meetings during the past Session.

PAPERS.

(1) PRESIDENTIAL ADDRESS.—Progress in Psychology.
(2) Dr. A. E. RUSSELL.—The Diagnosis of Acute Abdominal Disease.
(3) Mr. J. D. MALCOLM.—Extra-Uterine Gestation.
(4) Dr. F. J. MCCANN.—The Diagnosis of Uterine Cancer (with lantern demonstration).
(5) Dr. ALEXANDER MORISON.—On Boldness in the Treatment of Certain Phases of Pneumonia.
(6) Mr. CECIL H. LEAF.—The Clinical Causes of Cancer of the Breast.
(7) Dr. JAMES TAYLOR.—Some Points in the Treatment of Epilepsy and Allied Disorders.
(8) Mr. J. HOWELL EVANS.—Certain Intra- and Extra-Cranial Lesions produced by Injury at Birth (with lantern demonstration).

(9) Dr. W. H. B. Stoddart.—The Recognition and Treatment of Mental Disorder in Private Practice.

THE CAVENDISH LECTURE.

Dr. J. F. Goodhart.—Disease of the Heart.

CLINICAL CASES.

(1) Dr. P. S. Abraham.—A Case of Sclerodermia with Ulceration and Bullæ.
A Case of Extensive Keloid following Burns due to Dynamite Explosion.

(2) Mr. D. J. Armour.—A Case of Polycystic Kidney.
A Case of Bilateral Anchylosis of Jaw.

(3) Mr. A. Baldwin.—A Case of Tabes Dorsalis with Charcot's Disease of both Tarsi.

(4) Dr. J. B. Ball.—A Case of Malignant Disease of the Tonsil.
A Case of Otitis Media Suppurativa with Lateral Sinus Thrombosis (after operation).

(5) Dr. L. C. T. Dobson.—A Case of Congenital Ataxia.

(6) Mr. J. H. Evans.—A Case of Cervical Auricle.

(7) Mr. J. Garrett.—A Case of Granuloma Annulare.

(8) Dr. Z. Mennell.—A Case of Acromegaly.

(9) Dr. A. Morison.—A Case of Mitral Stenosis in a Man aged 75.
A Case of Renal Heart.

(10) Dr. A. E. Russell.—A Case of Myositis Ossificans.
A Case of Continuous Functional Tremor.

(11) Dr. E. A. Saunders.—A Case of Congenital Heart Disease.
A Mongolian Idiot.

(12) Dr. Seymour Taylor.—A Case of Acromegaly.

Signed on behalf of the Council,

C. M. TUKE, *President.*

A. ELLIOT,
W. H. WALTER, } *Hon. Secretaries.*

Dr. **FINANCIAL STATEMENT FOR THE YEAR ENDING MAY 31, 1905.** Cr.

RECEIPTS.	£	s.	d.	£	s.	d.
To Balance in hand from last Account				124	13	4
,, Subscriptions, including arrears collected	135	10	0			
,, Subscriptions paid in advance	4	0	0			
,, Balance from Dinner Fund and for Stamps	1	6	11			
				140	16	11
,, Subscriptions in arrear, May 31, 1905	54	0	0			
,, Subscriptions in arrear previous to May 31, 1904	38	15	0			
				92	15	0
				£358	5	3

EXPENDITURE.	£	s.	d.	£	s.	d.
By Grant to West London Medical Journal				25	0	0
,, ,, Library Fund..				5	0	0
,, Salary, Library Assistant (six months)				2	10	0
,, Post-Graduate College, for use of Rooms				20	0	0
,, Printing and Stationery, &c. :—						
Messrs. Churchman	23	17	4			
Editorial Secretary for Annual Report, &c.	9	5	6			
				33	2	10
,, Refreshments—Schornsheim				5	12	6
,, Porter's Wages				1	7	0
,, Postage, Telegrams, &c. :—						
Dr. Buttar, Session 1903-04	0	15	5			
Dr. Elliot ,, 1904-05	3	1	4			
Dr. Walter ,, ,, ...	0	5	4			
Treasurer for Stamped Envelopes, 1904-05	4	5	11			
Messrs. Churchman	17	0	0			
				25	8	0
,, Hire of Town Hall for Cavendish Lecture, 1904	4	16	0			
,, Deposit on Hire ,, ,, 1905	1	4	0			
				6	0	0
,, Typewriting Reports of Meetings				1	6	8
,, Deed Box				0	18	3
,, Cheque Book				0	2	1
				126	7	4
,, Balance at Bank, May 31, 1905 .. .. £137 19 0						
Less unpresented Cheque 3 0 11						
	134	18	1			
,, Cash in hands of Treasurer	4	4	10			
				139	2	11
,, Arrears of Subscriptions				92	15	0
				£358	5	3

Audited and found correct,

(Signed) W. E. C. MUSSON.

F. E. ROCK.

June 8, 1905.

OFFICERS AND COUNCIL.

SESSION 1905-1906.

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Librarian.

[illegible] H. W. CHAMBERS.

Editor of Journal.

DR. LEONARD DOBSON.

Editorial Secretary.

MR. J. G. PARDOE.

* Did not hold similar office last year.

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1882-1883. E. HART VINEN, M.D.
1883-1884. J. W. L. THUDICHUM, M.D.
1884-1885. F. LAWRANCE.
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1886-1887. F. H. ALDERSON, M.D.
1887-1888. C. B. KEETLEY.
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1904-1905. C. MOLESWORTH TUKE.

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(Corrected to September, 1905.)

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W. BRUCE CLARKE.
H. P. POTTER, M.D.
S. D. CLIPPINGDALE, M.D.

Members, September, 1905.

*** The Secretaries request that they may be informed immediately of any inaccuracy in the list, or of any change of address.

The abbreviations P., T., V.P., S., C., E.P., A., L., A.L., E.J., and E.S.J., *are attached to the names of those who have respectively held the offices of President, Treasurer, Vice-President, Secretary, Member of Council, Editor of Proceedings, Auditor, Librarian, Assistant Librarian, Editor of the* JOURNAL, *or Editorial Secretary of the* JOURNAL. *The date before each name signifies the date of election, and the letters* O.M. *signify original member.*

1904	Aarons, S. Jervois, M.D.	14, Stratford Place, W.
1897	Abel, Horace M. ..	10, King's Bench Walk, Inner Temple, E.C.
1901	Abraham, J., M.B. ..	Coleraine, County Derry, Ireland.
1886	Abraham, P., M.D. .. (V.P., S., C., E.P.)	2, Henrietta Street, Cavendish Square, W.
1896	Achard, A. L., M.D. ..	34A, Gloucester Place, W.
1896	Ackland, R. C. ..	54, Brook Street, W.
1892	Addinsell, A. W., M.B...	7, Upper Brook Street, W.
1890	Alderson, F. H., M.B. ..	21, Queen's Gate Terrace, S.W.
O.M.	Alderson, F. H., M.D. .. (P., V.P., C.)	Glenthorne, Princess Road, W. Bournemouth.
1902	Alderson, P. F., Surg.R.N.	R.N. Hospital, Portsmouth.

O.M.	Alderton, T. Gunton .. (P., T., V.P., S., C.)	82, The Grove, Hammersmith, W.
1902	Allan, C. H.	64, Westbourne Park Road, W.
1897	Allan, James, M.B. ..	Aldborough, Chislehurst, Kent.
1898	Allen, L. Lloyd ..	Crediton, Devon.
1897	Allingham, Walter ..	Whiteparish, near Salisbury, Wilts.
1884	Anderson, W. M., M.B...	Norville, Alleyn Park, W. Dulwich, S.E.
1903	Andrews, A. G., Fleet-Surgeon R.N.	Royal Naval Hospital, Great Yarmouth.
1885	Andrews, Charles .. (V.P., C., A.)	8, Auriol Road, West Kensington, W.
1899	Ansaldi, G., M.D. ..	San Remo, Italy.
1884	Appleton, T. A. ..	46, Britannia Road, Fulham, S.W
1904	Argles, Ernest E. ..	74, Oxford Terrace, Hyde Park, W.
1902	Armour, D. J., M.B. ..	89, Harley Street, W.
1897	Armstead, H. W., M.D.	30, Queensborough Terrace, W.
1898	Armstrong, J. T. ..	109, North End Road, W. Kensington, W.
1897	Arthur, David, M.D. ..	55, Uxbridge Road, W.
1904	Arthur, George, M.B. ..	30, The Avenue, Ealing, W.
1903	Atkins, J., M.B. ..	59, Addison Gardens, Kensington, W.
1885	Atkinson, T. R. (C.) ..	1, West Cromwell Road, S.W.
1902	Attlee, J., M.D. ..	58, Brook Street, W.
1893	Austen, Harold, M.D. ..	129, Harley Street, W.
1901	Bagram, George J., M.B.	1, Pembridge Gardens, W.
1904	Bailey, W. H., M.B. ..	Featherstone Hall, Southall.
1896	Baker, C. E., M.B. ..	5, Gledhow Gardens, S. Kensington, S.W.
1891	Baker, W. H.	65, Eaton Rise, Ealing, W.
O.M.	Baldock, A., M.B. (C.)..	180, Earl's Court Road, S.W.
1900	Baldwin, A. ..	6, Manchester Square, W.
1885	Ball, James B., M.D. .. (P., V.P., C., A.)	12, Upper Wimpole Street, W.
1904	Balme, Harold ..	33, Short's Gardens, Endell Street, W.C.
1904	Banham, S. M., M.B. ..	Ellesmere, Uxbridge Road, West Acton, W.
1898	Banting, Cecil, M.D. ..	Beeleigh, West Hill, Putney, S.W.
O.M.	Barnes, E. C. (V.P., C., A.)	194, Hammersmith Road, W.
1901	Barnes, G.	4, Wolverton Gardens, Hammersmith, W
1903	Barnes, H. E., M.B. ..	Eye, Suffolk.
1892	Barrett, A. K.	5, Bedford Gardens, Kensington, W.
1905	Barrett, Henry E.	123, Holland Park Avenue, W.
1898	Barrett, W. P. (V.P.) ..	Millfield House, 35, Cheriton Gardens, Folkestone.
1887	Bartlett, Edward (C.)..	38, Connaught Square, W.
1899	Barton, Charles N. ..	17, Redcliffe Gardens, S.W.
O.M.	Barton, J. K.	14, Ashburn Place, Courtfield Road, S.W.
1889	Bateman, A. G., M.B. ..	7, Queen Anne Street, W.
1897	Bathurst, L. Wood, M.D.	35, Colville Terrace, W.
1888	Batten, Rayner D., M.D. (C.)	Campden Lodge, Campden Hill Road, W.
1883	Battle, W. H.	49, Harley Street, W.
1902	Bayly, H. W.	New Oxford and Cambridge Club, 68, Pall Mall, S.W.
1898	Beddard, A. P., M.D. ..	44, Seymour Street, W.
1902	Beedham, H. W., M.B.	124, Mill Lane, West Hampstead, N.W.
1902	Belfrage, S. H., M.D. ..	77, Gloucester Place, Portman Square, W.
1901	Bell, H. J.	63, Sheen Lane, East Sheen, S.W.

1903	Bell, R. H., M.B. ..	27, Seymour Street, Portman Square, W.
O.M.	Benham, R. F... ..	11, Earl's Court Square, S.W.
O.M.	Bennett, C. H., M.D., J.P. (A.)	College House, Hammersmith, W.
1901	Bentham, R., Dep.Insp.-Gen. R.N.	Royal Naval Hospital, Malta.
1903	Bevan, A., M.D. ..	17, Kensington Gardens Terrace, W.
1899	Bevan, Richard ..	31, Girdler's Road, W. Kensington, W.
1891	Bidwell, L. A. (P., V.P., S., C., E.P., E.S.J.)	15, Upper Wimpole Street, W.
1902	Birt, J.	29, Belgrave Road, S.W.
1896	Bishop, T. H., M.D. ..	4, South Parade, Bedford Park, W.
1902	Blaber, Percy L. ..	Sunnybank, Shoot-up Hill, Hampstead, N.W
1903	Black, A. C.	Strettit Place, Paddock Wood S.O., Kent.
1902	Blaikie, J. Brunton, M.B.	80, Brook Street, W.
1898	Blair, C. S., M.D. ..	Matson Lodge, Sheen Road, Richmond.
1903	Blake, J. Ff.	1, Werter Road, Putney, S.W.
1885	Blenkinsop, W. H., M.B. (C.)	7, Powis Gardens, Bayswater, W.
1893	Bonney, W. Augustus, M.D.	100, Elm Park Gardens, S.W.
1901	Bonney, W. F. Victor, M.D.	10, Devonshire Street, W.
1889	Bontor, S. A., M.D. (V.P.)	Great Berkhamsted, Herts.
1903	Bott, Percival G.A., M.B.	17, Southwick Street, W.
O.M.	Bott, W. H.	High Street, Brentford.
1889	Bourke, Wm. H., M.D.	8, Moreton Gardens, S.W.
1893	Bourns, N. Whitelaw, M.D.	78, Redcliffe Gardens, South Kensington, S.W.
1899	Box, Stanley, M.D. ..	47, Gordon Road, Ealing.
1888	Boyton, E. T. A. ..	46, Sebert Road, Forest Gate, E.
1899	Braine, C. Carter ..	26, Wimpole Street, W.
1902	Bray, Ernest J., M.B. ..	
1900	Brewer, Dunstan ..	Eastern Fever Hospital, Homerton, N.E.
1898	Bridges, E. C., M.D. ..	2, Courtfield Road, S.W.
1893	Brinton, R. D., M.D. ..	8, Queen's Gate Terrace, S.W.
1896	Bromet, E., (V.P.) ..	Heather Lodge, Redhill.
1903	Brookhouse, C. T., M.D.	19, Wickham Road, Brockley, S.E.
1904	Brown, Chas. Wm. ..	Taung, British Bechuanaland, Cape Colony.
1903	Brown, E. H., M.D., Major I.M.S.	The Hermitage, Alipore, Calcutta, Bengal.
1896	Browne, E. S.	5, Cavendish Mansions, Langham Street, W.
1902	Browne, H. F., M.B. ..	29, Langham Street, Portland Place, W.
1903	Bruce, R. C., M.D. ..	10, Courtfield Road, S.W.
1890	Bruce, Robt. Marston..	Western Fever Hospital, Fulham, S.W.
1898	Brunton, W. R., M.B. ..	69, East India Road, Poplar, E.
1898	Bryan, F. Charles, M.D.	47, Princes Square, Bayswater, W.
1900	Buchanan, G. S., M.D...	9, Hammersmith Terrace, W.
1900	Burgess, W. M. ..	43, Nicoll Road, Harlesden, N.W.
1904	Burrows, W. H. ..	Eagle House, Avenue Road, Acton, W.
1903	Butler, H. O., M.B. ..	26, Grove Park Gardens, Chiswick, W.
1897	Buttar, C., M.D. (S., C.)	10, Kensington Gardens Square, W.
O.M.	Buxton, A. St. C. ..	44, Devonshire Street, W.
1898	Caley, H. A., M.D. ..	24, Upper Berkeley Street, W.
1896	Campbell, H., M.D. ..	23, Wimpole Street, W.
1904	Candler, John P., M.B.	West London Hospital, W.

1892	Carre-Smith, H. L. ..	74, Holland Park Avenue, W.
1903	Carter, W. R., M.B. ..	155, Uxbridge Road, W.
1896	Cathcart, G. C., M.B. ..	35, Harley Street, W.
1896	Chaldecott, J. H. ..	41, Welbeck Street, W.
1903	Challis, O., Capt. R.A.M.C.	c/o Messrs. Holt and Co., 3, Whitehall Place, S.W.
1892	Chambers, H. W. (V.P., C., L., A.L.)	101, Goldhawk Road, W.
O.M.	Chapman, C. W., M.D... (V.P., C.)	21, Weymouth Street, W.
1892	Cheatle, G. Lenthal, C.B. (C.)	117, Harley Street, W.
1902	Chowry-Muthu, D. J., M.D.	Mendip Hills Sanatorium, Wells, Somerset.
1894	Clarke, Ernest, M.D. ..	3, Chandos Street, Cavendish Square, W.
1900	Clarke, J. Jackson, M.B.	18, Portland Place, W.
O.M.	Clarke, W. Bruce, M.B. (P., V.P., C.)	51, Harley Street, W.
1888	Clemow, Arthur H. W., M.D. (V.P., S., C., L.)	101, Earl's Court Road, W.
O.M.	Clippingdale, S. D., M.D. (P., V.P., S., C., E.P.)	36, Holland Park Avenue, W.
1904	Cockle, Walter P., M.D.	1 Elm Villas, Ealing Green, W.
1889	Coker, O. C.	42, Woodville Gardens, Ealing, W.
1902	Cole, R. H., M.D. ..	48, Upper Berkeley Street, W.
1897	Collier, H. Stansfield ..	57A, Wimpole Street, W.
1883	Collier, M. P. M., M.S.	145, Harley Street, W.
1896	Collier, N. C.	18, West Kensington Gardens, W.
1901	Collum, R. W... ..	85, New Cavendish Street, W.
1890	Colman, W. S., M.D. (C.)	9, Wimpole Street, W.
1905	Coltart, G. H., M.B. ..	714, Fulham Road, S.W.
1900	Colyer, Stanley ..	12, Mitcham Lane, Streatham, S.W.
1899	Comber, C. T. T. ..	Mbanji, Victoria Falls, Rhodesia, South Africa.
O.M.	Cooper, Sir Alfred (P., T.)	9, Henrietta Street, Cavendish Square, W.
1901	Cooper, Bertram ..	19, Sutton Court Road, Chiswick, W.
1895	Corbould, V. A. L., M.D.	8, Victoria Road, Kensington, W.
1898	Coulson, J. E.	St. George's Infirmary, Fulham Road, S.W.
1888	Coutts, J.A., M.B. (V.P., C.)	54, Upper Berkeley Street, W.
1893	Cox, A. E.	58, High Street, Watford, Herts.
1885	Crombie, J., M.B. (V.P., C.)	Sidcup, Kent.
1905	Crook, Herbert E., M.D.	Ivermore, Richmond Road, Twickenham.
1895	Crookshank, F. G., M.D.	27, The Terrace, Barnes, S.W.
1905	Crosswell, Louis O., M.B.	District Medical Officer, Black River, Jamaica.
1901	Curl, S. W., M.B. ..	Colchester.
1897	Cutler, L.	1, Kensington Gate, W.
1899	Dalton, H. C. Fitz-Gerald	Cranbourn Mansions, Cranbourn Street, W.C.
1904	Dauber, John H., M.B.	29, Charles Street, Berkeley Square, W.
1904	Daniel, P. L.	152, Harley Street, W.
1897	Daniel, R. N.	13, Nevern Square, South Kensington, S.W.
1884	Daniell, D. Hugo ..	53, Campden Hill Square, W.
1898	Darley-Hartley, W., M.D.	Cauvin's Gift, Sea Point, Cape Town.

1903	Davidson, W. A. ..	235, Uxbridge Road, W.
1898	Davies, J., M.D. ..	87, Cambridge Gardens, W.
1897	Davis, H. J., M.B. ..	8, Portman Street, Portman Square, W.
1902	Dawe, Frank S., M.D. ..	119, High Road, Chiswick, W.
1897	Dawson, G. W. ..	9, Portman Street, W.
1896	De Castro, G.	79, Davies Street, Berkeley Square, W.
1902	Delbruck, R. E., M.B. ..	13, Buckingham Gate, S.W.
1901	Dendle, Frank, M.B. ..	Spring Grove, Isleworth.
1895	Denne, F. V., M.D. ..	69, Brook Green, W.
1886	Des Vœux, H., M.D. ..	14, Buckingham Gate, S.W.
1905	Dick, W. Barclay ..	70, Northfield Lane, West Ealing, W.
1887	Dickinson, T. V., M.D ..	33, Sloane Street, S.W.
1895	Dickman, H. G., M.B...	
1897	Dickson, T. H., M.B. ..	27, Scarsdale Villas, W.
1896	Dickson, W. P... ..	Combe Park, Weston, Bath.
1886	Diplock, L. B... ..	21, Heathfield Terrace, Chiswick, W.
1903	Dixson, C. F. L., M.D...	4, The Butts, Brentford.
1896	Dobson, L., M.D. (S., C., E.J.)	71, Holland Park Avenue, W.
1892	Dockrell, Morgan, M.D.	9, Cavendish Square, W.
1887	Dodd, H. W.	136, Harley Street, W.
O.M.	Dodsworth, F. C. (C.) ..	Ingledew, Chiswick, W.
1898	Don, W. Walton, M.D...	466, Edgware Road, W.
1899	Donald, James, M.B. ..	
O.M.	Doran, Alban (C.) ..	9, Granville Place, W.
1905	Dubourg, A. H. ..	51, Chester Terrace, S.W.
1898	Ducat, Arthur D., M.B.	3, Heathfield Gardens, Chiswick, W.
1887	Dudfield, T. Orme, M.D.	Ashburn, Kew Gardens Road, Surrey.
1903	Dudgeon, L. S. ..	6, Powis Gardens, Bayswater, W.
1900	Duncan, J. M., M.B. ..	Bonaccord, Wellholme Road West, Great Grimsby, Lincolnshire.
1884	Dunn, H. Percy .. (V.P., S., C., E.P., E.J.)	54, Wimpole Street, W.
1897	Dunn, J. C., M.D. ..	18, Portland Place, W.
1897	Dutch, Henry, M.D. ..	8, Berkeley Street, W.
1900	Ealand, Hugh.. ..	5, Castle Street, Farnham, Surrey.
1896	Eccles, G. Tolcher, M.B. (V.P.)	63, Sackville Road, Hove, Brighton.
1896	Eccles, H. Annesley, M.D.	Greystoke, 104, Church Road, Upper Norwood, S.E.
1890	Eccles, Wm. McAdam, M.S. (V.P., S., C., E. S.J.)	124, Harley Street, W.
1899	Eccles, W. Soltau ..	104, Church Road, Upper Norwood, S.E.
1893	Eddowes, Alfred, M.D.	28, Wimpole Street, W.
1896	Eden, T. W., M.D. ..	49, Queen Anne Street, W.
O.M.	Edwards, F. Swinford (P., V.P., C.)	55, Harley Street, W.
1903	Edwards, J. M. ..	Chilchester, London Lane, Bromley, Kent.
1897	Ellacombe, G. W. ..	Bitton Vicarage, near Bristol.
1893	Elliot, Andrew, M.D. .. (S., C.)	11, Upper Berkeley Street, W.
1896	Elliott, H. F.	Sidney House, Sutton Court Road, Chiswick, W.
1905	Emerson, Ambrose, M.D.	13, Earl's Court Square, W.
1895	English, T. J., M.D. ..	128, Fulham Road, S.W.

1888	Ensor, Edwin Thos., M.D.	162, Ladbroke Grove, W.
1900	Erskine, Robert, M.D...	62, Pembridge Villas, Bayswater, W.
1902	Evans, Arthur H., M.D., M.S.	84, Harley Street, W.
1903	Evans, E. Laming, M.D.	36, Bryanston Street, Great Cumberland Place, W.
1898	Evans, E. W. Spencer..	23, Wells Street, Oxford Street, W.
1903	Evans, J. Howell, M.B.	63, Grosvenor Street, W.
1904	Evans, W. Hesketh, M.D.	25, St. John's Crescent, Cardiff.
O.M.	Fenton, F. E.	Langstone, Ealing, W.
1897	Féré, E. N., M.D. ..	12, Northampton Square, E.C.
1898	Ferguson, A. S. ..	31, Harley Street, W.
1893	Fincham, W. S. (C.) ..	53, Kew Bridge Road, Brentford.
1897	Flavelle, J.	Junior Athenæum Club, 116, Piccadilly, W.
1904	Fleming, Thomas, M.D.	42, Harley Street, W.
1902	Fleming, W. L. R. ..	53, Queen Anne Street, W.
1899	Flemyng, George, M.D.	Newlands, Ashley Road, Epsom.
1902	Forbes, W. W... ..	"Kia Ora," Claremont Road, Marlow, Bucks.
1904	Forsyth, J. A. C., M.B.	2, Beaumont Street, W.
1901	Fort, H. R. T.	Chorley Wood, Rickmansworth.
1888	Fountain, Ed. Osborne, M.D.	Crossley House, Sutton Lane, Turnham Green, W.
1886	Fox, T. Colcott, M.B. ..	14, Harley Street, W.
1901	Frazer, J. E.	22, Croxted Road, West Dulwich, S.E.
1902	French, A. M., Fleet-Surg. R.N.	Langley, Beaufort Road, Kingston.
1900	French, Gilbert ..	Thorncroft, High Road, Chiswick, W.
O.M.	Friend, H. E.	1, St. Stephen's Crescent, Westbourne Park, W.
1903	Fry, W. E.	Aberdeen House, Queen Street, Hammersmith, W.
1905	Fuller, Arthur W., M.D.	37, The Avenue, Bedford Park, W.
1887	Gardner, W. T., M.B. (V.P., C.)	Fairseat, Poole Road, Bournemouth.
1904	Garrett, John ..	Nortoft, Churchfield Road, Acton, W.
1901	Gask, George E. ..	45, Weymouth Street, W.
1904	Gaster, Anghel, M.D. ..	68, Greencorft Gardens, West Hampstead, N.W.
1903	Gault, D., M.D. ..	Medical Superintendent's Office, Orokonui Home, Waitati, Otago, New Zealand.
1898	Gibbes, L. N.	1, Gloucester Walk, Kensington, W.
1884	Gillingham, A... ..	485, High Road, Chiswick, W.
1903	Godfrey, H. W., M.B. ..	Southleigh, Frinton-on-Sea, Essex.
1902	Gomess, A. F. B. ..	33, Drayton Gardens, S. Kensington, S.W.
1888	Goodsall, D. H. ..	17, Devonshire Place, W.
1901	Gordon-Smith, H., M.B.	17, Dartmouth Park Road, Highgate, N.
1893	Gossage, A. M., M.B. ..	54, Upper Berkeley Street, W.
1903	Graham, G. H., M.D. ..	44, Castlenau, Barnes, S.W.
1898	Grant, Alfred J., M.D. ..	6, Queen's Club Terrace, West Kensington, W.
1897	Granville, A. G. ..	56, Flanders Road, Bedford Park, W.
1894	Graydon, A.	73, Talbot Road, W.

1901	Greene, S. H.	110, Oxford Gardens, N. Kensington, W.
1903	Greg, A. H., M.B. ..	16, West Halkin Street, Belgrave Square, W.
1896	Gregory, E. T... ..	26, Redcliffe Gardens, S.W.
1896	Griffith, A. L., M.D. ..	606, Harrow Road, W.
1888	Griffiths, H. T., M.D. ..	5, Preston Candover, Basingstoke.
1900	Grindrod, Cyril J. ..	11, Knowsley Road, Rock Ferry, Cheshire.
1901	Grünbaum, Otto, M.D.	30A, Wimpole Street, W.
1898	Haines, Charles H., M.D.	Auckland, New Zealand.
1896	Halley, W.	Park House, 724, Fulham Road, S.W.
1901	Hancock, C. Sortain, M.D.	33, Fairlop Road, Leytonstone.
1889	Handfield - Jones, M., M.D.	35, Cavendish Square, W.
1901	Harold, John, M.B. ..	91, Harley Street, W.
1896	Harrison, C. J., M.D. ..	36, Cheyne Court, S.W.
O.M.	Harrison, H. F. E. ..	33, Shepherd's Bush Green, W.
1890	Harrison, Reginald ..	6, Lower Berkeley Street, W.
1898	Harrison, R. C. ..	33, Uxbridge Road, Ealing, W.
1896	Hartley, R., M.D. ..	Feltwell Lodge, Feltwell, near Brandon, Norfolk.
1896	Harvey, J. S., M.D. ..	1, Astwood Road, Cromwell Road, S.W.
1899	Haydon, Arthur G., M.D.	23, Henrietta Street, W.
1904	Heard, W. N., M.B. ..	94, Abingdon Road, Kensington, W.
1888	Heddy, W. J.	46, Redcliffe Gardens, S.W.
1905	Hedley, E. W., M.B.	56, Hans Place, Sloane Street, W.
1883	Hendley, T. H., Col., C.I.E., I.M.S. (Retd.) (C.)	4, Loudoun Road, St. John's Wood, N.W.
1900	Henshaw, H. W. ..	1, Priory Terrace, Kew.
1903	Hill, A. C., M.D. ..	169, Cromwell Road, W.
1890	Hill, William, M.D. ..	26, Weymouth Street, W.
1897	Hills, W. C. D.	New Bridge House, Upwell, Wisbech.
1888	Hill-Wilson, Arthur E.	30, Stamford Brook Road, W.
O.M.	Hogan, J. C., M.D. ..	3, Redcliffe Gardens, South Kensington, S.W.
1896	Hogg, F. Stanley ..	102, Lansdowne Road, Clapham Road, S.W.
1898	Hogg, F. S. D... ..	The Cedars, Rickmansworth.
1898	Holloway, Samuel F. ..	Holmwood, The Avenue, Bedford Park, W.
O.M.	Hood, D. W. C., C.V.O., M.D. (P., V.P.)	43, Green Street, W.
1903	Hoskyn, D. T., M.B., Fleet-Surg. R.N.	H.M.S. Crescent, Cape of Good Hope Station.
1904	Humphreys, Chas. S., M.D.	85, Gunterstone Road, West Kensington, W.
1885	Humphreys, F. W. ..	44, Addison Gardens, W.
1893	Hunter, William, M.D. (C.)	103, Harley Street, W.
1887	Hurlbutt, S.	15, Old Burlington Street, W.
1896	Ince, A. G.	Sturry, Kent.
1901	Inchley, O., M.D. ..	16, Victoria Street, Loughborough.
1899	Isaacs-Coke, E. P. ..	1, Sinclair Road, Kensington, W.
1902	James, Arthur, M.D. ..	69, Gloucester Terrace, W.
1895	James, J. Brindley ..	83, Bridge Road, Hammersmith, W.
O.M.	James, W. Culver, M.D. (C.)	15, Marloes Road, Kensington, W.
1896	Jessop, W. H., M.B. ..	113, Harley Street, W.

1891	John, William.. ..	24, Belsize Park Gardens, Hampstead, N.
1904	Johnston, Alex. J. J., Fleet Surgeon R.N.	Haslar Hospital.
1894	Johnston, George F., M.D.	3, Montagu Place, Montagu Square, W.
1900	Johnston, R. C., M.B., Capt. R.A.M.C.	c/o the D.G., A.M.S., 68, Victoria Street, S.W.
1905	Joll, Boyd Burnett. M.B.	8, Hanger Lane, Ealing, W.
1898	Jones, H. B., M.B. ..	
1899	Jones, H. S. Wansborough, M.B.	Poplar Cottage, Harrow.
1887	Jones, Macnaughton, M.D.	131, Harley Street, W.
1886	Juler, H. E.	23, Cavendish Square, W.
1896	Keep, A. C., M.D. ..	14, Gloucester Place, W.
O.M.	Keetley, C. B... .. (P., V.P., S., C., E.P., L.)	56, Grosvenor Street, W.
1899	Keown, David B. ..	187, Ebury Street, Eaton Square, W.
1902	Kerr, D. O., M.B. ..	32, Camberwell New Road, S.E.
1884	Kiallmark, H. W. ..	5, Pembridge Gardens, W.
1901	Kingsford, A. B. ..	19, Upper George Street, W.
1897	Kingsford, B. H., M.B.	Sherwood, Guildford Road, Woking.
1904	Kinsey-Morgan, A., M.D.	Hillcote, Richmond Hill, Bournemouth.
1904	Kinsey-Morgan A. ..	Littleburn, Poole Road, Bournemouth.
1892	Kinsey-Taylor, A. E., M.B.	26, Lancaster Gate, W.
1902	Kirby, R. A., M.B. ..	193, St. James's Court, S.W.
1897	Kirby, W., M.D. ..	Hilden, Sutton Court Road, Chiswick, W.
1900	Kirkaldy, W. B., M.D...	Chichester Infirmary, Chichester, Sussex.
1896	Kloster, O., M.B. ..	5, St. George's Square, Regent's Park, N.W.
1896	Knight, H.	Eskholme, Shirley, Southampton.
1887	Lake, Richard.. .. (V.P., S., C., E.P.)	60, Harley Street, W.
O.M.	Lamb, W. H., M.B. .. (V.P., C.)	23, Palace Court, W.
1894	Lancaster, H. F., M.D.	154, Westbourne Terrace, W.
1904	Landon, E. E. ..	Bradbourne House, Acton, W.
1901	Last, C. E.	Bletsoe House, Littlehampton.
O.M.	Lawrance, F. (P., T., V.P., C.)	3, St. Peter's Square, Hammersmith, W.
1904	Lawson, Fred. J., M.B.	Sherwood, 4, Palewell Park, East Sheen, S.W.
1905	Leaf, Cecil H... ..	75, Wimpole Street, W.
1905	Lees, Charles A. ..	39, Lavington Road, West Ealing, W.
1884	Leeson, Oliver J. ..	Collingham House, Cromwell Road, S.W.
1900	Lehane, D., M.D. ..	29, Egerton Crescent, S.W.
1898	Leslie, R. Murray, M.B.	26, Harley Street, W.
1898	Levy, A. G., M.D. ..	41, Devonshire Street, W.
1893	Lewis, Ernest Wool ..	The Hermitage, Fulham Palace Road, S.W.
1896	Ley, G., Staff-Surg. R.N.	11, Longfield Road, Ealing, W.
1902	Lilly, F. J., Fleet-Surgeon R.N.	H.M.S. "King Edward VII.," Atlantic Fleet, Gibraltar.
1901	Lister, T. D., M.D. ..	50, Brook Street, W.
1892	Lloyd, F. G.	103, Oakwood Court, Addison Road, W.

O.M.	Lloyd, R. W. .. .. (P., V.P., S., C, E.P.)	103, Oakwood Court, Addison Road, W.
1902	Lock, G. H.	133, Uxbridge Road, W.
1890	Lockyer, C. H. J., M.D. ..	117A, Harley Street, W.
1892	Loftus, A. S.	Collingbourne, Christchurch Road, Boscombe.
1883	Longhurst, A. K. ..	Hughenden, Mount Park Road, Ealing, W.
1896	Low, F. H., M.B. (V.P., C.)	Heath Bank, Blackheath Rise, S.E.
1882	Low, R. Marsden, M.B. (C.)	70, Philbeach Gardens, S.W.
1902	Lund, K. F., M.B. ..	2, Fopstone Road, Earl's Court, S.W.
O.M.	Lunn, J. R. (V.P., C.) ..	St. Marylebone Infirmary, Notting Hill, W.
1888	Lush, Percy J. F., M.B. (A.)	4, Maresfield Gardens, Hampstead, N.W.
1896	Lyle, F. W., M.D. ..	39, The Avenue, Castle Hill, Ealing, W.
1890	Lynes, John	2, Argyll Road, Kensington, W.
1898	Lyon, A. Barclay, M.D. (C.)	165, The Grove, Hammersmith, W.
1896	Lyth, E. R., M.B. ..	117, Goldhawk Road, W.
1894	McCann, F. J., M.D. .. (V.P., S., C.)	5, Curzon Street, W.
1897	McDougal, E. D. ..	Ruel, Walton-on-Thames.
1902	McKay, J. B., M.D. ..	43, St. Thomas's Square, Newport, I.W.
1902	McKenzie, J., M.B. ..	Station Hospital, Calcutta.
1898	Mackintosh, R. D., M.B.	The Bungalow, Mortlake, S.W.
1890	Maclaren, J. A., M.B. ..	2, Fairholme Road, W. Kensington, W.
1897	Macleod, W. A., M.B. ..	9, Pembridge Villas, Bayswater, W.
1897	McNamara, J., M.D. ..	3, Holland Road, Kensington, W.
1890	Macnaughton, G. W. F., M.D.	33, Lower Belgrave Street, S.W.
1902	Maguire, Geo., M.D. ..	Glengariff, Kew Road, Richmond, Surrey.
1898	Maidlow, W. H., M.D...	Ilminster, Somerset.
1903	Malcolm, A. J. ..	39, Gwendwr Road, W. Kensington, W.
1896	Malcolm, J. D., M.B. ..	13, Portman Street, Portman Square, W.
O.M.	Mallam, W. P. (V.P., C.)	169, Uxbridge Road, W.
1891	Mallard, F. R. (C., A.)..	23, Bridge Road, Hammersmith, W.
1890	Mansbridge, J. (C.) ..	112, Harley Street, W.
1890	Margrave, M. L. ..	3, Devonia, Newton Abbot, Devon.
1885	Mark, Leonard, M.D. .. (V.P., S., C., E.P., A.)	49, Oxford Terrace, Hyde Park, W.
1883	Marsh, Howard, M.C. ..	14, Hertford Street, Mayfair, W., and 10, Scrope Terrace, Cambridge.
1904	Marshall, J. C., M.D. ..	36, Albion Street, Hyde Park, W.
1885	Masters, J. A., M.D. (V.P., C.)	94, Knightsbridge, S.W.
1904	Masters, W. Hooper, M.D.	Oxford Villa, Castlenau, Barnes.
1898	Maunsell, D. F... ..	67, Earl's Court Road, S.W.
1903	Maxwell, R. F. ..	211, Uxbridge Road, W.
1898	May, C. Gould, M.D. ..	59, Cadogan Place, S.W.
1902	Meachen, G. Norman, M.D.	11, Devonshire Street, W.
1899	Melville, Stanley, M.D.	18, Nevern Road, Earl's Court, S.W.
1887	Mennell, Zebulon ..	1, Royal Crescent, Notting Hill, W.
1903	Mennell, Zebulon, M.B.	57, Holland Park Avenue, W.
1894	Menzies, Henry, M.B. ..	4, Ashley Gardens, S.W.

1885	Menzies, J. Herbert .. (V.P., S., C., E.P.)	47, Earl's Court Square, S.W.
1896	Miles, W. E.	17, Devonshire Place, Upper Wimpole Street, W.
1899	Millard, W. J. Kelson, M.D.	Frediden, Hewlett Road, Cheltenham.
1895	Miller, F. R., M.D. ..	70, Holland Road, Kensington, W.
1893	Mills, H. H., M.B. ..	21, St. Mary Abbott's Terrace, Kensington, W.
1901	Mitchell, G. H., M.B. ..	71, Craven Park, Harlesden, N.W.
1888	Moore, Stephen H. ..	75, Sydney Street, Chelsea, S.W.
1900	Morier, C. G. D. ..	1, Hamilton Terrace, N.W.
1896	Morison, A., M.D. (C.)..	14, Upper Berkeley Street, W.
1893	Morris, E. H. Grant, M.B.	8, Gloucester Terrace, Onslow Gardens, S.W.
1896	Mortimer, J. D., M.B. ..	4, Burton Court, Lower Sloane Street, S.W.
1896	Moullin, J. A. Mansell, M.B. (C.)	80, Porchester Terrace, W.
1896	Muggleton, F. C., M.D.	2, High Street, Gosport, Hants.
1905	Muir, J. C., M.D., ..	St. George's Infirmary, Fulham Road, S.W.
1905	Murray, Charles, M.D.	53, Trinity Road, Wimbledon, S.W.
1896	Musson, William C. (A.)	61, Bridge Avenue, Hammersmith, W.
1904	Nash, A. T., M.D. ..	Beresford House, Ladbroke Grove, W.
1896	Nicol, T. V.	147, Cromwell Road, S.W.
1904	Nightingale, P. A., M.D.	9, Campden Hill Road, Kensington, W.
1900	Nitch-Smith, R. ..	10, New Bond Street, W.
1903	Nolan, W.	20, Talbot Road, Bayswater, W.
1887	Noott, W. M.	8, Kensington Park Road, W.
1900	Norbury, W.	12, Moreton Gardens, S.W.
1896	Norman, F., M.D. ..	5, Holland Road, Brixton, S.W.
1900	Norton-Taylor, A. ..	West Hoathly, Sussex.
1902	Olver, W. R., M.B. ..	c/o Manager, Bank of New South Wales, Old Broad Street, E.C.
1895	Orr, J. J., M.D. ..	493, King's Road, Chelsea, S.W.
1882	Orton, G. H., M.B. ..	7, Campden Hill Road, Kensington, W.
1902	Orton, G. Harrison, M.B.	7, Campden Hill Road, Kensington, W.
1894	Otway, A. Carrol ..	63, Castlenau, Barnes, S.W.
1905	Overy, Harry, M.B., ..	8, Devonshire Street, Portland Place, W.
1902	Oxley, A. James Rice, M.D. (C.)	5, Kensington Square, W.
1902	Page, H. M., M.D. ..	14, Grenville Place, S.W.
1888	Paget, Stephen (C.) ..	70, Harley Street, W.
1905	Palmer, C. Spencer ..	Brooke Lodge, Redhill.
O.M.	Palmer, F. S., M.D. ..	19, Harley Street, W.
1887	Paramore, R., M.D. ..	2, Gordon Square, W.C.
1896	Pardoe, J. G., M.B. (C., E.S.J.)	77, Wimpole Street, W.
1894	Parker, Charles A. ..	141, Harley Street, W.
1890	Parker, W. Turnour ..	68, Lillie Road, Fulham, S.W.
1903	Parmer, W. F., M.B. ..	2, Linden Gardens, Notting Hill Gate, W.
1901	Parsons, C. T., M.D. ..	Fulham Infirmary, Hammersmith, W.
1904	Parsons, H. Compton..	Castle House, Torrington, N. Devon.
1988	Paterson, H. J., M.B. ..	9, Upper Wimpole Street, W.

1905	Paterson, T. W. S., M.D.	42, Holland Park, W.
1887	Paterson, W. B. ..	7A, Manchester Square, W.
1882	Patmore, Tennyson (C.)	63, Cambridge Gardens, North Kensington, W.
1896	Paton, E. P., M.D., M.S. (C., S.)	53, Queen Anne Street, W.
1899	Patterson, J., M.D. ..	British Consulate, Constantinople.
1889	Pattison, E. S.	Granville House, Fulham Road, S.W.
1903	Peake, W. H., M.D. ..	1, Platts Lane, Hampstead, N.W.
1900	Pentreath, H. M. ..	14, Paragon, Ramsgate, Kent.
1900	Pernet, George ..	152, Harley Street, W.
1897	Philps, F. G.	3, Richmond Mansions, Earl's Court, S.W.
O.M.	Pickett, J., M.D.(V.P., C.)	49, Queen Victoria Street, E.C.
1905	Pike, Douglas R., M.B.	3, Cromwell Crescent, Kensington, S.W.
1897	Pitt, F. D.	115, High Road, Chiswick, W.
1905	Plews, J. M.	7, Guildford Place, Russell Square, W.C.
1883	Pocock, F. E., M.D. ..	The Limes, St. Mark's Road, Notting Hill, W.
1901	Podmore, R.	The Cottage, S. Parade, Bedford Park, W.
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1898	Pollock, Rowland (C., V.P.)	Penton Lodge, Mill Hill Park, W.
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O.M.	Potter, H. Percy, M.D... (P., V.P., C.)	Kensington Infirmary, Marloes Road, W.
1899	Poulter, A. R.	67, Gordon Mansions, W.C.
1900	Poynder, F. C., M.B. ..	92, High Street, East Grinstead.
1900	Pratt, C. C.	10, Downleaze, Sneyd Park, Bristol.
1896	Pritchard, O., M.D. ..	37, Southwick Street, Hyde Park, W.
1902	Provis, F. Lionel ..	11, Brook Street, W.
1898	Ralph, R. M., M.D. ..	Lanark District Asylum, Hartwood Spotts, Lanarkshire, N.B.
1903	Reckitt, E. B., M.D. ..	Boston, Lincolnshire.
1885	Reece, R. J., M.D. ..	62, Addison Gardens, W.
1902	Reid, G., M.B.	Mersey Road, Blundellsands, Liverpool.
1883	Reid, John, M.D. ..	43, Lonsdale Road, Barnes.
1902	Renny, A. W., M.B. ..	Durham Lodge, Shirley, Southampton.
1891	Revill, G. L. H. ..	Heighington, Lincoln.
1903	Rhodes, J. H., M.B. ..	30, Brechim Place, S. Kensington, S.W.
O.M.	Richardson, Gilbert, M.D.	19, Putney Hill, S.W.
1904	Richardson, Martin J. M.B.	47, Gloucester Place, Portman Square, W.
1903	Richmond, W. S. ..	25, Queensberry Place, S. Kensington, S.W.
1887	Roberts, John D. ..	103, Uxbridge Road, Ealing, W.
1900	Robinson, E. Tait, M.D.	21, Gloucester Place, W.
1890	Robinson, G. H. D., M.D. (V.P., S., C.)	17, Seymour Street, Portman Square, W.
1903	Robson, A. W. Mayo ..	8, Park Crescent, Portland Place, W.
1898	Rock, Frank E., M.D. (A.)	Southerton House, Hammersmith, W.
1898	Roe, William F. ..	96, Grosvenor Road, Highbury, N.
O.M.	Rogers, Hildyard ..	43, Uxbridge Road, W.

1900	Ross, T. Mackay, M.B.	21, Cremorne Road, Chelsea, S.W.
1883	Roughton, E. W., M.D.	38, Queen Anne Street, W.
1893	Routh, Amand J. M., M.D.	14A, Manchester Square, W.
1902	Ruck, D. N.	1, St. Mary's Road, Ealing, W.
1898	Rudd, W. A., M.D. ..	Danehurst, Acton Hill, W.
1902	Russell, A. E., M.D. (C.)	9, Wimpole Street, W.
1898	Rutherford, A. F., M.B. (S., C.)	Meadow House, St. Boswell's, N.B.
1897	Ryall, Charles	51, Queen Anne Street, W.
1893	Ryall, E. C.	30, Harley Street, W.
1901	St. Aubyn-Farrer, Chas.	7, Westbourne Park Road, W.
1902	Salt, E. C., M.B. ..	Bridge Street, Burton-on-Trent.
1899	Saunders, E. A., M.B. (S., C.)	49, Harley Street, W.C.
1893	Savery, Frank (V.P., C.)	4, Mount Park Road, Ealing, W.
O.M.	Schacht, F. F., M.D. .. (P., V.P., S., C., L.)	153, Cromwell Road, S.W.
1899	Schilling, George ..	41, Tollington Park, N.
1895	Schofield, S. R., M.B. ..	1, Gunterstone Road, West Kensington, W.
1889	Scott, A., M.D... ..	Bradford Street, Bocking, Essex.
1894	Scott, A. L.	115, Uxbridge Road, Ealing, W.
1901	Scott, C. C., M.B. ..	The Hollies, St. Margarets, Twickenham.
1898	Scott, Lindley M., M.D.	98, Sloane Street, S.W.
1897	Seccombe, P., M.B. ..	Fern Lea, West Drayton.
1902	Seymour, H. F., M.B. ..	College Gates, High Street, Worcester.
1894	Shaw, Arthur H. P. ..	Cranbrook, Kent.
1898	Shaw-Mackenzie, J. A., M.D.	42, Green Street, Park Lane, W.
O.M.	Sheldon, T., M.D. (V.P.)	25, Powis Square, Notting Hill, W.
1901	Sheldon, W. Sirr ..	44, Cornwall Road, Notting Hill.
1901	Shepheard, H. ..	19, Brook Green, W.
1896	Shuter, G. P., M.B. (V.P., S., C.)	Cleveland House, Chiswick Lane, W.
1895	Shuttleworth, G. E., M.D.	Ancaster House, Richmond, Surrey.
1904	Sibley, O. Carden ..	11, Elmwood Gardens, Acton Hill, W.
1903	Sikes, A. W., M.D. ..	40, Argyll Road, Kensington, W.
1902	Silcock, A., M.D., Lt.-Col. I.M.S.	Civil Surgeon, Raipur, Central Provinces, India.
1904	Simson, H. J. F., M.B.	80, Brook Street, W.
1899	Simpson, G. A. Garry (C., V.P.)	Bardon House, East Acton, W.
1898	Sinclair, A. M. Ross, M.B. (C., V.P.)	213, New King's Road, Parson's Green, S.W.
1904	Sinclair, John, M.D. ..	2, Fitchett's Lane, Noble Street. E.C.
1900	Slater, W., M.D. ..	Woodland Cottage, New Wanstead, N.E.
1901	Slocock, R.	Spilsby, Lincolnshire.
1901	Smith, A. Tennyson, M.D.	Shanklin, Orpington, Kent.
1897	Smith, G. C., M.D. ..	14, South Street, Newton Abbot.
1883	Smith, H. A., M.D. ..	84, London Road, Bromley.
1900	Smith, Joseph, J.P. ..	15, Bath Road, Bedford Park, W.
1886	Smith, Stanley, M.D. ..	68, Wimpole Street, W.
1886	Smith, Travers R., M.D.	13, Kilburn Park Road, N.W.

1896	Snape, E., M.D. ..	41, Welbeck Street, W.
1901	Snowden, A. de W., M.D.	St. Vedast, 25, Carlton Road, Putney, S.W.
1898	Spaull, Percy W. ..	1, Stanwick Road, W. Kensington, W.
1903	Speirs, H. M., M.B. ..	The Cedars, Diss, Norfolk.
1890	Spencer, Herbert, M.D.	104, Harley Street, W.
1896	Spencer, M. H., M.D. ..	92, Oxford Gardens, N. Kensington, W.
1896	Squire, J. E., M.D. ..	5, Harley Street, W.
1900	Stabb, Arthur, M.B. ..	132, Harley Street, W.
1886	Starkie, R. F., M.D. ..	76, Gloucester Street, Warwick Square, S.W.
1891	Startin, James ..	15, Harley Street, Cavendish Square, W.
1896	Staveley, W. H. C. ..	24, Sloane Gardens, S.W.
1898	Steegmann, E. J., M.B.	Derby House, Spring Grove, Isleworth.
1904	Steggall, Septimus L. J.	Port Simon, Costa Rica.
1905	Stoddart, W. H. B., M.D.	Bethlem Royal Hospital, S.E.
1903	Stoker, E. W.	9, Old Burlington Street, W.
1887	Sunderland, Sept., M.D.	11, Cavendish Place, W.
1896	Sutherland, G. A., M.D.	73, Wimpole Street, W.
1900	Swain, E.	Fairholme, Uxbridge Road, Hampton Hill.
1896	Swinhoe, G. R. ..	The Close, New Swindon, Wilts.
1887	Tait, E. S., M.D. ..	48, Highbury Park, N.
1905	Taylor, James, M.D. ..	49, Welbeck Street, W.
1892	Taylor, Michael H. (C.)	Newark House, Richmond, S.W.
1905	Taylor, Thomas	Lavington House, Ealing, W.
1886	Taylor, Seymour, M.D. (P., V.P., C.)	16, Seymour Street, Portman Square, W.
1893	Thompson, Maitland ..	The Marlowes, Boxmoor, Herts.
1889	Thomson, J. C., M.D. ..	111, Sinclair Road, West Kensington Park, W.
1902	Thorne-Thorne, Leslie, M.D.	45, Inverness Terrace, W.
1901	Thornhill, W. H., Lt.-Col. I.M.S.	85, Pimlico Road, S.W.
1889	Thornton, B.	Berkeley Lodge, Margate.
1904	Thornton, H. J. ..	The Maples, Acton, W.
1902	Timmins, J. L., M.B. ..	64, Crown Road, St. Margaret's, S.W.
1905	Tomlinson, W. R. ..	57, Airdale Avenue, Chiswick, W.
1897	Townsend, M. M. ..	15, Queen Street, Hammersmith, W.
1905	Travers, E. F., M.B. ..	2, Phillamore Gardens, W.
1900	Travers, F. T., M.B. ..	6, Clarendon Place, Maidstone.
O.M.	Travers, W., M.D. .. (P., V.P., C.)	2, Phillimore Gardens, Kensington, W.
1900	Treherne, F. H., Lt.-Col. R.A.M.C.	c/o The Director-General A.M.S., 68, Victoria Street, S.W.
1898	Trethowan, William, M.B.	128, Aberdeen Street, Perth, W. Australia.
O.M.	Tuke, C. M. (P., V.P., C.)	Chiswick House, Chiswick, W.
1892	Tuke, T. Seymour, M.B.	30, Queen Anne Street, W.
1896	Tunnicliffe, F. W., M.D.	129, Harley Street, W.
1893	Turnbull, G. L., M.D. ..	47, Ladbroke Square, W.
1897	Twynam, A. E. E. ..	Gold Coast Government Railways, Lekondi, West Africa.
1896	Twynam, G. E. (V.P., C.)	31, Gledhow Gardens, South Kensington, S.W.
1902	Tyrrell, F. A. C., M.B. ..	Belle Vue, Swanley, Kent.
1896	Tyson, W. J., M.D. ..	Castle Hill Avenue, Folkestone.

1896	Vallencey, A. d'Estampes	34, Shaftesbury Road, Hammersmith, W.
1891	Waggett, E. B., M.B. ..	45, Upper Brook Street, W.
1903	Wainwright, F. R., M.D.	Aldwych, Studland, Dorset.
1904	Walcot, Thomas, M.D...	Camberley, Surrey.
ɔ.M.	Walker, Horace (V.P., C.)	143, Hammersmith Road, W.
1901	Walker, L. A., M.B. ..	168, Ladbroke Grove, W.
1889	Wall, Reginald B. ..	72, Bishop's Road, W.
1896	Wallace, F. G., M.B. ..	186, Earl's Court Road, S.W.
1898	Wallace, Joseph B., M.B.	39, Battersea Rise, S.W.
1886	Walsh, David, M.D. ..	Lamb Building, Temple, E.C.
1895	Walter, W. H., M.D. (S., C.)	Hambleden Croft, Windmill Road, Brentford.
1896	Walters, F. R., M.D. ..	Pinecroft, Farnham, Surrey.
1903	Ward, E. C., M.D., Staff-Surg. R.N.	H.M.S. Black Prince, Queenstown, Ireland.
1899	Warde, Wilfrid B., M.D.	13, Lonsdale Gardens, Tunbridge Wells.
1897	Waterhouse, H. F., M.D.	81, Wimpole Street, W.
1897	Watson, J. K., M.D. ..	Byfleet, Surrey.
1892	Watts, A. T. Guy, M.B.	36, Russell Road, Kensington, W.
1890	Waugh, H. D., M.D. ..	18, Onslow Gardens, S.W.
1888	Webb, H. (V.P., C.) ..	Wentworth House, Parson's Green, S.W.
1885	Wells, A. G. (V.P., C.) ..	215, North End Road, West Kensington, W.
1901	West, Samuel, M.D. ..	15, Wimpole Street, W.
1893	Wharry, H. G. Oliphant	55, Park Street, Grosvenor Square, W.
1883	Wheatley, A. W., M.B. (A.)	1, Kensington Square Mansions, Young Street, Kensington, W.
1891	White, C. Percival, M.B.	22, Cadogan Gardens, S.W.
1903	Whitelegge, W. A., M.D., Fleet-Surgeon R.N.	H.M.S. Cornwallis, Mediterranean Station.
1896	Whitfield, Arthur, M.D. (C.)	21, Bentinck Street, W.
1904	Wigan, Clarence E., M.D.	24, Cheyne Walk, Chelsea, S.W.
1888	Williams, Alex. L. ..	33, Campden House Road, Kensington, W.
1902	Williams, Chisholm ..	20, Bedford Square, W.C.
1890	Williams, H. Lloyd ..	2, Upper Wimpole Street, W.
1889	Williams, R. Muzio, M.D.	35, Kensington Park Gardens, W.
1905	Wilson, E.M., C.B., C.M.G., D.S.O., Lt.-Col. R.A.M.C. (Retired)	Belmont, Osborne Road, South Famborough.
1904	Wilson, John H., M.D..	7, Ladbroke Square, W.
1891	Wilson, R. W., M.D. ..	The Moorings, Ennerdale Road, Kew Gardens.
1891	Wilson, William, M.B...	184, Goldhawk Road, W.
1904	Wiseman, J. G. ..	Stranraer, St. Peter's Road, St. Margaret's-on-Thames.
1897	Woakes, C.	52, Harley Street, W.
1889	Wood, N. T., M.D. .. (V.P., S., C.)	42, Elvaston Place, S.W.
1884	Woodforde, A. P. ..	160, Goldhawk Road, Shepherd's Bush, W.
1900	Wood-Hill, H. G. ..	45, Station Road, Beccles, Suffolk.
1889	Wornum, G. Porter ..	58, Belsize Park, N.W.
1899	Wylie, A., M.D. ..	7, Harley Street, W.

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1889	Webster, G. A., M.B. ..	Caulfield, Melbourne.
1904	Clark, F. W., M.D. ..	M.O.H. Hong Kong.
1905	Page, A. M., Fleet-Surg. R.N.	H.M.S. Implacable, Malta.
1905	Hendley, H., M.D., Lt.-Col. I.M.S.	

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